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ABSTRACT

The status of education in Enewetak, an island in the Republic of the Marshall Islands, is described in this report. Concern about the island's educational system was generated by the fact that none of the eighth-grade graduates had passed the government high school entrance exam since 1980. A visit made by a representative of the Pacific Region Educational Laboratory (PREL) sought to document the circumstances regarding elementary education, and to assist in developing consensus-building for addressing educational needs. The first sections provide a background of the educational system and describe its current status. Underlying concerns are outlined next, which include cultural displacement, self-esteem and motivation, and health. A plan is offered for using educational and community resources to improve student achievement, with emphasis on implementing school restructuring within the larger context of community life. Appendices contain the educational development and community involvement plans, correspondence, a list of school staff, and a nutrition report. (LMI)

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A Report on Technical Assistance for School Improvement: Observations, Issues, and Recommendations for the People of Enewetak

Pacific Region Educational Laboratory (PREL)
Visit to Enewetak Atoll
Republic of the Marshall Islands

February 17-28, 1992

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May 14, 1992

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PROLOGUE

In February 1992, PREL traveled to the island of Enewetak in the Republic of the Marshall Islands to provide diagnostic and planning assistance on education. The request was made through Mr. Davor Pevec, the legal counsel for Enewetak, who had made it clear that the people were in real need of assistance to improve the status of their education system. The major concern arises from the fact that, since relocation in 1980, none of the children graduating from the local eighth grade class has passed the entrance examination for the government high school in Majuro.

Thus, the nature of PREL's visit was twofold: 1) to document circumstances regarding elementary education on Enewetak, and 2) to assist the people of Enewetak in reaching a consensus on steps they would take to address their needs. This report contains observations of issues and concerns that seem to plague the island, as well as recommendations for both short- and long-term activities that can bring about desirable student achievement.

PREL spent seven days on Enewetak, meeting and conversing with a cross-section of the community. The mayor and his council, the parent teacher association, and the principal and school staff were all asked the same basic question for which they gave very similar responses. The basic wish of all these people is to see their children achieve in school, go away for more education, and return with the skills and knowledge relevant to the development of the community and a better future.

Enewetak needs major reforms in its education system. However, this cannot be done by one person or one group of people alone. An effort to improve the status quo requires sound guidance from the local, national, and federal leaders; collaboration among agencies, both on- and off-island; and an appropriate staff development program. PREL is absolutely certain that a complete overhaul of any system requires similar and simultaneous changes in all the sub-systems and at all levels of society. With its current manageable population, much potential exists for the attainment of the people's vision for a better-managed economy, which can be sustained by an educated populace.

The people of Enewetak want their children to return. However, this will not happen unless resources are developed and jobs are created to lure them back. The ocean is a vast resource to be tapped. Sound strategic planning is crucial for this purpose, and models of economic and educational plans that have worked or failed elsewhere can certainly assist as the community begins to shape their plan.

PREL looks forward to a continuing relationship with the people of Enewetak. We are highly committed to the promotion of excellence in education for our Pacific children.

ACKNOWLEDGMENTS

PREL wishes to extend its appreciation to the mayor of Enewetak, Mr. Neptali Peter, and his councilmen, for the warm welcome and hospitality, and permission to talk with various people in the community about education. A great mahalo is also extended to Samson Yoshitara and Johnson Hernest for the time they gave up from work and family in order to serve as translators, and to arrange and coordinate meetings and other activities for us. They are wonderful role models for the people of Enewetak.

Our visit was also made very comfortable by the assistance of Stan Miyasato, U.S. Department of Energy field station manager, and his wife Yoshimida. Thank you for the insights and the chance to connect with family, friends, and our office in Honolulu. Thank you Captain John Enloe and crew of the Wetak II for your insights, willingness to help out with transportation, and the very heartwarming sail to the outer islets. It is rare to experience nature's beauty in such fashion. The lobsters were delicious.

To the different groups we met, PREL's work would have been lopsided without your input. Thank you Mr. Simon Aigni and your teachers. PREL is empathetic to your needs and we look forward to seeing you again in the near future. Thanks also to Mr. Benjamin Gideon and his PTA for sharing your vision with us. Your leadership in the children's education is crucial.

PREL also wishes to thank the Ministry of Education in Majuro for your input on this visit. Thank you Secretary Hilda Heine-Jetnil and Mrs. Cathy Relang. We look forward to a continuing collaboration in the attempt to assist the people of Enewetak to realize their hopes and dreams for their children.

Last but not least, mahalo to Mr. Davor Pevec for approaching PREL on behalf of the people of Enewetak. Your efforts to help the people are commendable. PREL will continue to seek your advice to get the reform process underway.

To all the people of Enewetak, **Komol Tata!**

Karen Aka
PREL Program Specialist

Luafata Simanu-Klutz
PREL Program Specialist

INTRODUCTION

Background of PREL Involvement

In late 1991, Mr. Davor Pevec, legal counsel for the people of Enewetak, approached Dr. John Kofel, PREL Executive Director, to ask if PREL would provide technical assistance on education. The mayor and the people of Enewetak were concerned that the status of education since relocation in the early eighties has been consistently low. The mayor and his people wonder why none of the eighth graders graduated since 1980 has passed the entrance examination to the high school in Majuro. PREL accepted the request from Mr. Pevec and, in January 1992, Dr. Kofel apprised the Minister of Education for the Republic of the Marshall Islands, Mr. Phillip Muller, of the laboratory's intentions regarding Mr. Pevec's request.

Upon arrival in Majuro but before departure for Enewetak, the two PREL representatives met with Mrs. Cathy Relang from the Ministry of Education to discuss the situation. In Enewetak, they met with a significant cross-section of the community, from the mayor and the government council to the PTA and principal and teachers. Informal conversations were also conducted with key people who run the daily affairs of the island.

The following report is a documentation of observations of the Enewetak community. It is a record of factors both physical and social, of issues and concerns, and of situations that currently exist and affect student achievement. Included are some recommendations for an island and educational development plan.

A chronology outlines events before, during, and after the trip. Also included is a brief account of the history of Enewetak that provides a perspective and a framework upon which recommendations were based. In addition to a detailed educational and community development plan, the appendices contain a list of questions asked of various people, a list of teachers and their classes and levels of education, all the correspondence with different people before and after the visit, and a nutrition report developed for Enewetak. Also provided is a reference list of books, articles, and pamphlets that provided PREL with a look into the historical, political, and educational events in Enewetak pre/post relocation.

Chronology of Meetings and Observations Before, During, and After the Visit

February 6	Met with Davor Pevec to obtain more background information on the intended visit.
February 10	Left for Majuro; plane returned to Honolulu due to poor weather, causing a week's delay.
February 17	Flew to Majuro.

February 19	Talked briefly to Jackson Adding at Enewetak Government Council Office in Majuro, and then later met with Cathy Relang, Acting Secretary of Education for the Marshall Islands. Discussed issues regarding staff development and technical assistance that might have affected the school system in Enewetak.
February 20	Flew to Enewetak.
February 21	A.M. - Met with Mayor Neptali Peter, PTA President Benjamin Gideon, Johnson Hernest, and Samson Yoshitara, our translator. Johnson and Samson are also council members. P.M. - Met with the principal and teachers of Enewetak Elementary School.
February 22	Sailed on the Wetak II with Captain John Enloe and crew to Enjebi and Leroy islets to gather food--fish, coconuts, and birds.
February 23	Attended Protestant church service.
February 24	Met with the Council and the PTA.
February 25	Met with teachers individually and conducted a general observation of the school.
February 26	Visited the Head Start program in the morning and later took a boatride to Medren to visit with Aichy Aisek and Daiwal Relang at the school. Found the school already closed because there was no lunch that day. Honored with a farewell dinner provided by the Mayor and the community.
February 27	Left Enewetak for Majuro.
February 28	Met with newly-appointed Secretary Hilda Heine-Jetnil and former Acting Secretary Cathy Relang to discuss the visit and to brainstorm for future services.
March 20	Drafted report.
March 27	Circulated report for comments from PREL staff.
April 3	Identified Mrs. Alice Buck as potential translator for the report.
April 6	Met with Alice Buck to discuss the context of the report and costs.

BACKGROUND OF ENEWETAK

Enewetak (Illusion Island) History

Enewetak is the farthest atoll from Majuro, the center of the government of the Republic of the Marshall Islands. It is at the northwestern end of the chain. It is closer to Pohnpei than it is to most of the Marshall Islands.

In 1948, the United States of America transported all the people of Enewetak to Ujelang, a smaller atoll approximately 200 miles southeast, and with a landmass barely able to sustain this additional population. The people were convinced of the need to leave in order for the United States to test nuclear weapons in their area; this sacrifice would be a "most valued contribution to the salvation of mankind from the evils of the communist empire"(Dibblin, 1988). Subsequently, the people did not see their island again for more than three decades. By then, most of those returning had been born on Ujelang, and they experienced severe pangs of homesickness and cultural displacement during relocation back on Enewetak. In the meantime, while the people were trying to adjust to Ujelang, the U.S. government exploded about forty nuclear bombs on Enewetak Atoll, bombing two islets out of existence and leaving the area highly contaminated with radiation.

In 1958, the last bomb was dropped on Enewetak Atoll. A few years later, and with an increase of rodents on Ujelang, the people of Enewetak began to demand relocation. And neededly so at that point because their own population had grown to the level of overcrowding on Ujelang. Negotiations for reparations began then, and plans for a cleanup got under way.

In the 1970s, the U.S. Department of Energy undertook a major cleanup of Enewetak, scraping the top contaminated soil from the largest islets of Enewetak and Medren, and replanting coconuts, pandanus, breadfruit, and other vegetation indigenous to an atoll. In 1980, after extensive testing for safe radiation levels, the people were finally given the go-ahead to move back to Enewetak Atoll, a place (as they were to discover) with little resemblance to the island left behind in the 1940s.

Upon return, the people found that the government had built typhoon-proof concrete houses, spreading them down the length of the island. Each house was equipped with a water catchment system. The transplanted vegetation was just beginning to grow, a factor which has made the people dependent on imported goods and services. Today, canned goods, rice, canned meat, flour, and sugar make up the main diet. However, a recent study of nutrition on Enewetak revealed that while their current foodstuffs fill the stomach, they have contributed to the high level of malnutrition, especially among the children. The local foods, which are rich in the necessary nutrients, are a long way from producing in abundance.

Part of the package for relocation is monetary compensation. The people of Enewetak currently receive annual supplemental funding of at least US$1 million for food supplies and other miscellaneous items from the United States Department of Energy (DOE) and the Department of Agriculture (USDA). This is in addition to compensation that is administered by the RMI government.

The Current Community

There are approximately 600-800 people living on Enewetak. About one fourth of those are children between birth and late teens. Another 800 Enewetakese are scattered among the other islands in the Marshalls and/or abroad including college students in Majuro, Hawaii, and the U.S. mainland. For obvious reasons, many of those who have left have not returned; this is a major point of concern for those who are left behind.

Enewetak's welfare is supervised and monitored by a popularly elected mayor and council, each serving a four year term. All the current members are male. A senator is also popularly elected. He resides on Majuro. The council's responsibilities mirror those of the national government: there are departments or ministries, each headed by a minister. The minister of education provides liaison services between the council and the national ministry.

The council maintains some autonomy over island affairs. It is known that the council has often acted independently of the national government. For example, last summer a decision was made to advertise for American teachers to come and teach on Enewetak. A few candidates have responded to the advertisement. PREL has offered to help with recruitment and screening.

The only employment agencies on Enewetak are the U.S. DOE and the RMI government. A DOE field station, under the supervision of Stan Miyasato, monitors the island for a variety of services such as their desalination plant, electricity, and transportation. The field station is also responsible for the ordering of food and other supplies. A defunct community store, which was monitored by the field station, generated extra revenue that was used for communal projects. Evidence of this cooperative effort can be seen in a well-equipped playground for preschoolers, a baseball field, and volleyball and basketball equipment and courts. The field station also provides guest accommodations at a reasonable rate for visitors to Enewetak including DOE personnel and others.

Captain John Enloe is employed by the RMI government. Under his supervision and guidance, local men are learning seamanship on the motor sail schooner, the Wetak II. The boat is provided by the national government for use in gathering food from the outer islets and places like Pohnpei for local food and Ebeye in Kwajalein Atoll for imported food. It also takes the men, and sometimes whole families, to fish and hunt birds, coconut crabs, and even goes as far as Bikini Atoll for lobsters.

Enewetak has very few people who have had a college education. Among them is Samson Yoshitara, our translator and one of the council members, who had postsecondary education in California. He has a good command of English and is well respected by the community. He was very involved in the discussions to seek outside assistance for their education system. Another is Johnson Hernest, a council member with a college education. He is the field station's local manager. Johnson is also highly concerned with the low status of education on the island.

There are two Christian churches on the island--United Church of Christ (Protestant) and Assemblies of God. The former engages the majority of the population; the ministers are Marshallese, rotated biannually from other atolls in the Marshalls. There appears to be a distinct role for the ministers in the community. While they are highly respected, they do not get involved in community projects except for matters directly concerning the church. The ministers were not included in our meeting with the council.

Each denomination has a women's group. The women mainly raise funds for trips to conferences locally or abroad. Unfortunately the two groups do not seem to be aware of the need for them to be involved in improving the welfare of the children. As is typical of many island communities throughout the Pacific, the churches are the most well kept areas of Enewetak. The buildings are well maintained; the ministers have the most pigs and the best houses.

CURRENT CONDITIONS OF EDUCATION IN ENEWETAK

Demographics

There are some 160 students at Enewetak Elementary and about 30 at Medren. On an average day, only a few students are absent. While most of the students come from an all Enewetakese background, there are a few with parents from Pohnpei, Kosrae, or other atolls in the Marshalls. The school has no real drop-out problem. However, there is no policy for truancy or for dealing with children who decide to stay out of school. During PREL's visit, the people indicated that there were no students on Ujelang at the moment; however, about a hundred people have been preparing for a return trip there.

Operations

The school does not have a lot of formalized administrative, instructional, or curricular policies. There is no real policy for attendance, lunch, materials, curriculum, or general supervision. The lunch program, subsidized by the U.S. Department of Agriculture, is controlled by a cook and a couple of assistants. It is a common practice for the children to be dismissed early if lunch is dropped from the day's agenda. During our visit, the students had to be dismissed early because the cook was indisposed the whole week.

There are no guidelines for substitution. When a teacher is away for whatever length of time, his/her students do not come to school. In the past, the students were distributed among the other classes, but that apparently did not work out. Scheduling is done locally except when tests for eighth graders need to be administered.

School Staff

Head Start

There are about 60 preschoolers ages 3 to 5 in the Head Start program. This program is coordinated by Metty Joram, a Nebraska-trained Marshallese woman from another district in the Republic. She is also a teacher. Assisting her are Neikoman Hernest, teacher, and Kojama Johanes, teacher's aide.

The Head Start staff have attended some intensive in-service training and this is evident in the affective set up of the room. In spite of the unpleasant physical appearance of the building (aluminum with one door out), the teachers do try their best to make the program as conducive to learning as they can.

The Head Start lunch program seems to be a well thought out, research-based plan. Three times a week, the students eat local food which is highly nutritious. This includes fish, taro, breadfruit, and so on. The other two days provide a regular cafeteria plate of canned meat, canned fruit, and vegetables.

Elementary

The Enewetak staff consists of two women and five men. They are all Marshallese; however, the principal comes from another atoll although married to an Enewetak woman.

Mr. Simon Aigni is a teaching principal. He teaches a composite class of fifth and sixth graders. He has an associate of science degree (A.S.) in education from the College of Micronesia in the Marshall Islands and is currently doing coursework towards a bachelor's degree through the University of Guam and the University of Hawaii. Mr. Aigni oversees a staff of six.

One of the two women, Jacqueline John, teaches second grade; Jonaline Heckerz teaches third. Jacqueline participates in the Territorial Teachers Training Assistance Program (TTTAP) in Majuro during the summer breaks. Jonaline, who has had U.S. mainland college experience, would like to complete her college program in the near future. Jonaline is one of the few people in Enewetak with a very good command of English. She has had exposure to a variety of teaching strategies and approaches while working in Majuro in the early 1980s.

Enewetak teaching staff includes Airen John, 1st grade; Jacqueline John, 2nd grade; Jonaline Heckerz, 3rd grade; Hiram John, 4th grade; Simon Aigni, 5th and 6th grades combined; Jebra Ned, 7th grade; and Jorlang Gideon, 8th grade. Aichy Aisek and Daiwal Relang are the only teachers on the islet of Medren. School was not in session when we visited, and PREL did not have a chance to talk to the two men.

Most of the teachers have had some training in a variety of teaching approaches and curriculum implementation. Jebra, Jorlang, and Aichy have had community college training in education, graduating with associate of science degrees from the College of Micronesia, now called the College of the Marshall Islands. Most, if not all, in-service training has been done in Majuro where conditions differ from Enewetak. A problem with application upon return often occurs when teachers confront the lack of materials and supervision in their own classrooms.

Curriculum and Instruction

The language of instruction on Enewetak is Marshallese although the official languages for the Ministry are both Marshallese and English. Stateside curricula exist for reading, math, spelling, and social studies. There is a locally-developed science curriculum written in both English and Marshallese. South Pacific Commission English Language Arts and Tate books are used as the main programs in some classrooms. We were told that they are being phased out. Grades 2 and 3 have only math and language arts. The school does not have a program in physical education, health, music, art, or athletics. Materials are

scarce. The students do not have enough books to read or to write in. Many come to school without pencils or paper. There are no crayons, construction paper, newsprint, and so forth. Teaching and learning are restricted to the lecture format and to the teacher's preference for a particular subject.

Facilities

There are two schools in Enewetak Atoll--one on the islet of Enewetak and the other on neighboring Medren. Both school buildings are aluminum structures divided into regular-sized classrooms. Beyond that, there is not much else. There are a few desks and chairs. The teachers are without tables and the students have no shelving for their books. The fourth grade classroom does not have a chalkboard. On rainy days, wooden shutters block out what little ventilation there is across the entire building. In many classrooms, sharp ends of the aluminum sheets stick out, posing a danger for the students. Each classroom is accessed through a single door.

The principal's office on Enewetak also has sparse furniture. It contains a long table, a few chairs, and no shelves. There is an adjoining room that serves as a library, with one set of shelves of basal readers, spellers, and workbooks. There is a duplicating machine in one corner and a derelict looking science kit lies unopened in another.

Summary of Current Conditions

It is clear from PREL's summary of current conditions that the Enewetak school system has no structure for effective schooling. The teachers are frustrated from a lack of teaching materials, leadership, and community support as well as poor salaries. The physical plant is unhealthy and even dangerous. Roaming pigs pose a health hazard. Most disappointing of all, there is no real connection between the school and the other agencies that operate on the island such as the churches, health and dental clinic, and the DOE field station.

The Head Start program, on the other hand, is promising in spite of the generally poor education system. However, all the work done at this early level will be futile unless there is a major overhaul of the whole social environment. With this in mind, we asked to meet with all the major sectors of the community--council, parents, teachers, students, and other agencies. Our strategy involved using a series of questions to solicit the communities' perceptions of education and of how they would like to see the process work for their children. Our translator was cued to act as a facilitator, prompting the participants for their views. Typically, PREL would pull back and allow the people to dialog among themselves with Samson summarizing the discussion for us. This worked effectively since, upon analysis of the data from these meetings, we found that the people were unanimous in what they want for their children, how they feel towards the status quo, and the kinds of solutions they offer. These are included in our recommendations.

UNDERLYING CONCERNS

General

When asked what they thought education should do for the students of Enewetak, the community--mayor, council members, teachers, parents, and others--were of the consensus that their children should be able to leave the island to get the best training and then return with skills and knowledge to benefit everyone. Only through this process would those who leave have the desire to return and run their own affairs. Moreover, not only would they come back, but they would also possess a respect for those that stayed behind. There is a mixed sense of disappointment and resentment towards some of the people who have returned, and the mayor and council would like to see this attitude changed.

The various meetings also evinced the tremendous frustration over the fact that none of the children has passed the high school entrance exam that all eighth graders in the Republic must take to qualify for the high school on Majuro. For a decade, one or two eighth graders have been selected from Enewetak each year in spite of their inability to pass the exam. This is, to a large extent, an embarrassing situation and the community wonders if radiation exposure is a contributing factor. Be that as it may, there are many obvious weaknesses in the education system itself that contribute to this dilemma.

Some issues and concerns were observed, deduced, and confirmed from interactions with the community. These are major underlying factors that helped shape the recommendations from PREL.

Cultural Identity

From conversations and meetings with various members of the community, we found that there is a tremendous sense of cultural displacement among the adults on Enewetak. This contributes to the "in transit" mood of some people, as described by our helpers. About a hundred people have been preparing to return to Ujelang to live because Enewetak does not provide them with tools and an environment where they can continue their culture and traditions. Most of the adult population were born on Ujelang. Their belief and value systems were shaped by an environment that does not look much like Enewetak. Although almost all of the current student population were born on Enewetak, it is apparent that as long as the parents feel cheated of their culture, their children will be confused over their identity and their ability to look at Enewetak as their home.

Self-Esteem and Motivation

Because of cultural displacement, the people of Enewetak may be unfamiliar with their new environment and the skills necessary to survive there. Superficially, most of their needs are being met by a money economy--a system that has made them more dependent

on outside resources. At the moment, the U.S. Department of Energy and the Marshallese government are doing their best to train the local men in skills important to maintain and improve energy and food supplies. A lot more, however, needs to be done to build local capacity and to allow the community to develop their resources according to what they want.

Health

It has been reported that Enewetak has the highest level of malnutrition in the Marshall Islands (Pacific Magazine, September/October 1991). This is ironic since the community has been granted substantial compensation from the U.S. government. However, this issue exists because of poor consumer skills: the people must be convinced that sodas and chips and other canned stuffs are empty foods that inhibit physical and cognitive growth. Moreover, this diet promotes chronic ailments such as sores and runny noses which are prevalent among newborns, infants, and toddlers. Many adults--parents and teachers alike--were surprised by this revelation. Regretfully, recent research on nutrition on Enewetak has not reached the people for whom it was conducted. PREL has included a copy of this research in the appendices.

ENEWETAK EDUCATIONAL DEVELOPMENT AND COMMUNITY INVOLVEMENT PLAN

PREL suggests that reforming a system fractionally can do more harm than good. We therefore recommend that school restructuring must be done within the larger context of Enewetakese life; to improve only the school is a Band-Aid solution that will not have long lasting impact. Our recommendations are categorized into educational and community sections: educational factors/resources directly impact student achievement both on- and off-island; community factors/resources also affect student achievement, although not as directly.

Educational Recommendations

1. **Restore Cultural Identity/Curriculum and Instructional Design.** As a school project for all the teachers and students, begin to collect information from the elders who were in Enewetak prior to Ujelang. Seek information that has to do with the Enewetakese culture, not the German, Japanese, or others. Information to be collected should include:

history	food items
dance	games
legends or folk tales	traditional garb
traditions	traditional government
religion	gender expectations
generational expectations	childrearing
family political lineage	two clans (Enjebi and Enewetak)
food cultivation	festivals
rites of passage	codes, symbols, rituals, etc.

This project could be a rich learning experience for the children and community of Enewetak. Information should be documented and published in some form so that all children in Enewetak can learn about their culture. This documentation could subsequently become the actual core curriculum for instructional use.

2. **"Rebelle" Help.** As requested by the council and parents, "rebelle" (foreign) educators should be brought in to help the community restructure the school system. The people of Enewetak feel strongly about this and have therefore begun their search on the U.S. mainland and in Hawaii. There is a belief that someone from the local region would not be as effective because of cultural subjectivity. PREL will assist the community to identify the "right" candidates for the positions.

3. **Staff Development.** Technical assistance and teacher training are initiated by the Ministry of Education in areas of instructional techniques, curriculum

development and adaptation, and use of current curriculum. The current curriculum consists of American textbooks, South Pacific Commission (SPC) readers, and a local science program. However, more needs to be done for a custom-made program to specifically meet the local needs. Training should be on a more regular basis on Enewetak, so that the teachers can immediately and appropriately apply and adjust strategies to suit individual and group needs. There is definitely a need for monitoring to ensure that teachers apply the training appropriately.

4. **Partnerships.** School improvement needs to involve more than school staff. Key partners are:

- **Marshall Islands Ministry of Education.** As suggested by the mayor, the community-based governance system (CBGS) implemented by the Ministry of Education in the Marshalls should be assessed for its appropriateness to the needs of Enewetak. During our meeting with Mayor Neptali Peter, he indicated an awareness of the program; however, he would like to postpone action until some results are available. Cathy Relang suggests that the pilot CBGS on Likiep Atoll, with its close monitoring by the Catholic nuns, could be a model for Enewetak. Monitoring is a crucial need for program longevity. PREL intends to continue to seek the Ministry's advice.

- **Parent-Teacher Association (PTA).** The Enewetak PTA is a concerned group that is responsible for existing policies, with council approval. This body needs to be strengthened through training in leadership, management, and bridging home-school gaps. When asked if they would be willing to receive adult basic education, they were very receptive. They are willing to help the teachers monitor a nutrition program that is research-based and consistently maintained.

- **Interagency Networking.** Establishing a close relationship with agencies on Enewetak and off-island can bring in necessary expertise and other resources to help the school. Cooperation in an isolated community like Enewetak is crucial for survival, both in school and in the community at large. Meetings and training on a regular basis must be planned so that resource distribution is fair and equitable.

- **Church Groups.** Not only are the women's groups needed to help raise funds for the church, but they are also important for the development of education. There is a great need for the church and the school to work together on such things as curriculum development and adaptation, cultural literacy, and support for vernacular literacy. The ministers can be used in a teaching capacity for a variety of subjects. The most influential element in an island community is its church ministry; its involvement is recommended.

5. **Recreational Activities.** There is great potential for an athletic and recreational program to promote physical and mental fitness. Activities such as basketball, volleyball, baseball, tennis, ocean-related sports, and others can be incorporated into the curriculum. The revival of cultural and traditional arts and crafts could be initiated at the school level to help restore cultural identity as well as to promote cottage industry as an economic option.

6. **Lunch Program.** The current lunch program is costing the students valuable instruction time and proper nutrition. PREL recommends staff development for the cooks, a sound policy for hiring, planning, and monitoring of operations. Consultants can be hired for these purposes and the school can coordinate with the health clinic and the Parent-Teacher Association to monitor performance on a regular basis. A good lunch program will result in better student achievement.

7. **Facilities.** Research documents the importance of a healthy physical environment for learning. Currently, the school facilities are unsafe, unpleasant to the eye, and not very healthy. Enewetak needs to take a very good look at how unhealthy the aluminum structures are for the children. A concerted effort must be made to change the face of the school, and to provide a better-equipped school for the people. Another factor that must be taken into consideration is the hot and humid climate.

Community Recommendations

As already mentioned, the educational system on Enewetak is in poor shape and has been so for some time. To look at reform just at the school level is to waste resources and time. Therefore, we recommend a community-based school improvement process whereby everyone in the community--from the mayor and council members to the churches and other agencies to the DOE and RMI government--is required to get involved. Here are some examples of how this involvement can take place:

1. **Long-Range Economic Planning.** The council has control of the resource distribution and development on Enewetak. Skills are needed for this purpose. All those concerned should go through some kind of partnership training on economic strategic planning. Since the island now has a money economy, it is important to manage finances with sound vision for the future of the people.

2. **Community Involvement.** Cooperation is the best option for information dissemination and program longevity and survival. There is no reason why the health personnel cannot be part of the daily faculty. John Enloe and Stan Miyasato, although already doing wonderful things with the males, can perhaps have the students sometime during the week for things like science and math. The

atolls provide a wonderful laboratory for math and science, areas which do not have to be confined to a traditional classroom. The church women's clubs can assist in weaving, cooking, fund raising, and nutrition planning. Since the female teachers (including Head Start) represent both churches, they can get together and provide a united front to bridge existing gaps in communication.

3. **Adult Basic Education.** The isolation of the island and the irregularity of air service to Enewetak limits the availability of outside help. There is a real need to educate the entire adult population, not only in health and nutrition but also in literacy, family planning, financial management, drug and alcohol prevention/rehabilitation, fund raising activities, seamanship, food collecting, and communication. The students should not be restricted to learning only from teachers; parents can be trained and encouraged to provide curriculum and instruction at home. The health department and the PTA could conduct nutrition classes for people of all ages. Adult nutrition is just as important as child nutrition. Adults need to learn how to be role models for the younger ones. There is also a need to budget money and food to minimize such problems as irregular shipments and spoilage.

4. **Recruitment and Screening of Outside Help.** Although Enewetak provides a respite from the stress of urban life and an opportunity to touch base with nature, its isolation and limited social activities can make even the enthusiasts want to catch the next plane out. Those involved in bringing in outside help must brainstorm and set realistic criteria for hiring.

CONCLUSION

Enewetak, a bittersweet consequence of history, politics, culture, and nature. Enewetak, an island in the sun, longing for answers and a rightful part in the scheme of things. Perhaps there is no better way to sum up a heartfelt experience than to sing about it. Here is a song we wrote for the people and presented on our last night there. Taking our lead from Harry Belafonte, we sang to the tune of his "Island in the Sun," keeping the original chorus in between the verses.

Chorus

Oh island in the sun
Willed to me by my father's hand.
All my days I will sing in praise
Of your forest, waters, your shining sands.

1. Beautiful people, you are so kind,
Forever and always you will be in our minds.
The warmth with which you welcomed us,
Our hearts together we built a trust.

2. We loved your sands, and we loved your waters,
The coconuts, the fish, and best of all the lobsters.
We sailed around on the Wetak II,
Enjoying the friendship meant for us and you.

3. And as we talked of our future plans,
For Enewetak's children who need a friend,
To fulfill their hopes for a peaceful place,
Where their sons and daughters can live with grace.

4. Now the teachers, they cannot do much
Without your support and without your trust.
There's much to be done for a better school.
Together we create a local resource pool.

5. So Mayor Peter and the councilmen,
Enewetak's future is in your hands.
The PTA, the cooks, and church,
Must come together and successfully merge.

6. And now our song has come to an end.
Komol tata to all our friends.
To Mayor Peter, Johnson, Samson, and Stan.
To Captain John and all the Wetak gang.

7. We will miss you very much,
When we return to our office as such.
But we promise we will return,
For PREL is committed to the very end.

Prepared by:

Karen Aka
PREL Program Specialist

Luafata Simanu-Kutz
PREL Program Specialist

RESOURCES

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APPENDIX A

DETAILED EDUCATIONAL DEVELOPMENT PLAN AND COMMUNITY INVOLVEMENT PLAN

EDUCATIONAL DEVELOPMENT PLAN

ISSUES	RECOMMENDATIONS	ACTION NEEDED	OUTCOMES
Loss of Cultural Identity There seems to be an overwhelming sense of cultural displacement being experienced by many people of Enewetak.	• Restore cultural identity through school curriculum and instruction. Teachers could do this as part of their daily routines and extracurricular activities.	• Document cultural and traditional practices through interviews, video taping, etc., in the following categories: history, food, utensils, dance, weddings and funerals, dancing and singing, games, art, myths and legends, clothes, religion, gender expectations, generational expectations, childrearing practices, division of labor, communication styles, learning and teaching styles. • Document current practices in some of the above categories: have each family document over a period of time current family practices.	• Video tapes, written copies of tape text; curriculum materials. • Profound understanding of the past and their ancestors. • Well-rounded core curriculum-language arts, art, music, health, science, math, etc. • Better self-esteem, motivation, communication, sense of self and others, literacy skills, cooperative skills, pride, sensitivity towards each other. • List of daily routines in above categories.
Rebelle Help The Council and PTA recommend that American teachers and other resource people be hired.	• Establish criteria for hiring personnel from off-island: Hawaii, U.S mainland, and/or other areas of the Pacific.	• Brainstorm for criteria for hiring contractual "rebelle" teachers, administrators, and consultants. • List benefits for the employees. • Devise a contract of agreement form.	• A list of criteria for hiring rebelle teachers. • Salary scale that would be realistic for everyone. • Benefit package. • Written agreement.

ISSUES	RECOMMENDATIONS	ACTION NEEDED	OUTCOMES
<u>Staff Development</u> The teachers are isolated from the local community and outside assistance. Professional growth is lacking due to an absence of an appropriate policy on training, evaluation, and monitoring.	• Establish a custom-made program for on island, on-the-job training in administration, curriculum development, instructional philosophies and methodologies, parent/community involvement, communication, child development, career ladder, pre-employment training, classroom management, assessment and evaluation. (e.g., Peacesat equipment might allow for regular in-service.) • Provide off-island staff development opportunities such as participation in the Administrator Mentoring Program in Honolulu, school visits, conferences, training institutes, etc. • Short-term consultants.	• Establish an ongoing system of staff development. • Design a chain of command to include other leaders and sections of the community. • Design a system for monitoring and evaluating teachers on performance and professional and personal growth. • Research available and relevant training. • Research and pursue sources of funding. (i.e., field station for travel, per diem, etc.) • Identify specific areas where consultants are needed. • Research available consultants.	• A calendar of staff development activities throughout the year. • Flowchart of the chain of command for education. • List of performance, professional and personal growth criteria; a system for monitoring and evaluations. • Better trained teachers. • A better resource pool. • Information to enhance the decision making. • Pool of consultants.

ISSUES	RECOMMENDATIONS	ACTION NEEDED	OUTCOMES
<u>Partnership</u> Teachers cannot improve the school system alone. Teachers are currently blamed for the status quo.	• Parent-Teacher Association Involvement	• Adjust existing governance that controls the PTA affairs. • Train PTA in school matters and how they can be more effective. • Establish a year-long calendar for PTA activities. • If possible, compensate officers for their assignments. • Identify budget sources and management systems. • Initiate leadership and management training.	• A legal document for intent, by-laws, rules, and responsibilities. • Ongoing training and development. • A year-long calendar of events. • Allocations for officers' compensation. • A list of funding sources and a possible management system. • A calendar for ongoing leadership training.
	• Ministry of Education-- a. Establish a trusting relationship with the national staff and other relevant ministries. b. Adopt the national Community-Based Governance System (CBGS).	• Convene a series of meetings, preferably on Enewetak. • Design a conference-style package to attract the government to come to Enewetak for a week. • Propose a written agreement with assigned responsibilities and a timeline. • Secure a follow-through system and assign people to be accountable for this.	• A plan for meetings and recording their proceedings. • Conferences held on island. • Written agreement. • Reports/updates/monitoring package.

ISSUES	RECOMMENDATIONS	ACTION NEEDED	OUTCOMES
Partnership (Continued)	• Interagency Networking. This is crucial for the success and survival of any program designed.	• Involve expertise from different agencies in curriculum development, instruction, cost sharing, and staff development. • Conduct regular meetings for updates of community and school involvement, training, and other projects.	• Knowledgeable staff. • Monthly meetings or whatever is suitable for everyone.
	• Church Involvement.	• Women's groups can assist or lead staff in fund raising for school improvement, cultural manufacturing such as weaving, home economics, nutrition programs, etc. Men's groups can teach carving, fishing skills, hunting skills (coconut crabs and birds). • Ministers can provide Bible stories in Marshallese for language and cultural literacy. After-school or summer language classes in the vernacular can be promoted by the church.	• An alternative source of funds; revived skills in crafts, weaving, fishing, hunting; improved knowledge of nutrition among the students and adults. • Maintenance of vernacular. Activities in the summer to keep children occupied.

BEST COPY AVAILABLE

ISSUES	RECOMMENDATIONS	ACTION NEEDED	OUTCOMES
<u>Recreation</u> There is very little physical and recreational activity cn Enewetak.	• Equipment already on island should be put to use under a sound maintenance and utilization plan. • Attempts should be made to use the ocean for recreational and economic purposes. This can provide students and families with enjoyment and the whole community with another alternative source of revenue and jobs.	• Devise a year-round sports and recreational plan around the equipment and facilities already on island. • Seek appropriate expertise for the various sports. • Devise a physical education curriculum for sports and dancing, both traditional and modern, for the students. • Fence in an area along the intertidal zone for swimming activities.	• A recreational plan. • Appropriate staffing. • A physical education and health curriculum. • Swimming area and lessons.
<u>Lunch Program</u> The current program is costing the students valuable instruction time and proper nutrition.	• Establish a staff development program for the cooks. • Establish a policy for hiring, monitoring, and replacing staff.	• Hire consultants to train and advise current staff on how to improve and maintain a new system, and gain more knowledge in the areas of nutrition, budgeting food and other resources, management skills, substitution system, attitudes, ethics, interpersonal relationships, and communication. • Devise a plan for monitoring program.	• Better performance; nutritious lunches; daily service; better substitution system; healthy children; effective communication and better rapport with other school/community members. • Monitoring plan.
<u>Facilities</u> Existing school facilities are not conducive to learning. The buildings are hot and dangerous.	• A feasibility study needs to be done for building materials that are durable and typhoon-proof. A blueprint for a school building that is pleasing to the eye and practical in a hot and humid climate would be ideal for the children of Enewetak. • Furnish school with a teachers' lounge, library, enough desks, chalk boards, etc.	• Hire contractors to do a study; identify best construction plan and workers; build and/or buy enough equipment and furniture for each classroom. • Identify and allocate budget for facilities and equipment.	• Study recommendations. • Contractors. • New facilities. • Jobs. • Teachers lounge and resource center. • Furniture and equipment.

COMMUNITY INVOLVEMENT PLAN

ISSUES	RECOMMENDATIONS	ACTION NEEDED	OUTCOMES
<u>Long-Range Strategic Plan</u> The mayor and the council are very concerned with the development of Enewetak and how to attract "good thinking and ideas" back to the island.	• Develop a long-range strategic plan for Enewetak.	• Hire a facilitator to assist the mayor and council to develop a long-range plan. (Include follow-up with the facilitator.)	• Long-range plan.
<u>Economic Development</u> Each group that was interviewed has serious concerns about the opportunity available for those who want to return to Enewetak.	• Design an economic development plan.	• Review completed assessments of economic development (i.e. button factory, fishing, diving, training center, etc.) • Identify future employment needs required to allow Enewetak to progress. • Design an educational program to encourage students to pursue those careers. • Meet regularly with the community to generate support and ownership.	• List of economic options. • List of employment needs. • Career plan. • Meetings.
<u>Community Involvement</u> There appears to be a lack of unity among the people in addressing issues of Enewetak.	• Develop collaborative partnerships between the government council, churches, social services, U.S. employees, and the school to address issues (i.e., economic development, adult education, school improvement).	• Convene meetings between various potential partners to establish a coalition. • With the coalition, establish a schedule for interagency networking and communication. • Identify issues and priorities. • Develop action plans to implement with designated people responsible and time lines.	• Meetings and records of meetings. • Schedule of networking. • Priority list. • Action plans and time lines.

ISSUES	RECOMMENDATIONS	ACTION NEEDED	OUTCOMES
Adult Education There are areas where the community needs to be more informed in order to make sound decisions about their daily living and planning for the future.	• Establish an adult education program to include literacy, health and nutrition, family planning and parenting, financial management, etc.	• Convene the community coalition to design an adult education program. • Identify one area for instruction and a specific audience (i.e., health and nutrition for Head Start parents). • Identify instructors. • Provide training to instructors (i.e., Mary from Montana, PREL staff, etc.). • Conduct a specific number of classes in the area of instruction (i.e., once a week for one month). • Expand program by adding classes as interest, instructors, and support are available.	• Education program. • List of areas for instruction and specific audience. • Pool of instructors. • Workshops by Mary from Montana. • Schedule of classes over a period of time. • Program growth and expansion.
Recruitment and Screening of Outside Help The council and PTA can assist the school in seeking outside help for the various school-community projects.	• Identify areas where the expertise is crucial and then devise a recruitment and screening program for bringing in such expertise. • Devise a marketing package that will attract off-island personnel (length of contract, benefits, salary, expectations, job descriptions, etc.). • A standard letter of agreement that acts as a binding contract.	• List areas of need, recruitment criteria, screening instrument, and sources of funding. • Brainstorm for ways to promote the need of the island for outside help. • Assign a task force to brainstorm and design a contract or letter of agreement which will bind the parties in a realistic and beneficial relationship.	• A written document of criteria for recruitment and screening. Also a list of funding sources for the task and to help bring in help. • A brochure, poster, etc. • A written agreement.

APPENDIX B

Correspondence

Pacific Region Educational Laboratory
1164 Bishop Street, Suite 1409 • Honolulu, Hawaii 96813 • U.S.A.
PHONE: (808) 532-1900 FAX: (808) 532-1922 GTE: PREL.LAB TELEX: 6502847212

December 11, 1991

Davor Z. Pevec
Attorney at Law
Pauahi Tower
1001 Bishop Suite 2424
Honolulu, Hawaii 96813

Dear Davor and Jack,

It was a pleasure meeting with you yesterday to discuss possible PREL collaboration for the Enewetak Council's project to improve education. John, Karen, and I are excited about the prospect of assisting in this activity. I have enclosed a list of questions which would give us some background on the school and community before our site visit in January. I would appreciate answers to these questions and any other related information that you think would prepare us to provide you with appropriate services. Please send the information to our office at your convenience.

I look forward to hearing from you.

Sincerely,

Alice J. Kawakami, PH. D.
Director of Research Services

A nonprofit corporation for educational research and improvement, serving Pacific children and educators in American Samoa • Commonwealth of the Northern Mariana Islands • Federated States of Micronesia: Chuuk, Kosrae, Pohnpei, Yap • Guam • Hawaii • Republic of the Marshall Islands • Republic of Palau

AN EQUAL OPPORTUNITY EMPLOYER

Pacific Region Educational Laboratory
1164 Bishop Street, Suite 1409 • Honolulu, Hawaii 96813 • U.S.A.
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December 17, 1991

SENT VIA FAX

MEMORANDUM

TO: Davor Pevec

FROM: John W. Kofel

RE: Enewetak Visit

Davor, we have done some initial planning and have identified two staff members, myself and Jim Brough, who will be making the trip to Enewetak. Official names and titles are as follows:

Pacific Region Educational Laboratory (PREL) Visitation Team:

Dr. John W. Kofel Executive Director	Dr. James Brough Resident Scholar.

Both persons are senior educators with extensive experience in education, research, development, planning, and program reform.

We are making arrangements to travel to Enewetak on Thursday, January 16th and returning to Majuro on Thursday, January 23rd. I would ask that you help us make trailer reservations. Please advise me on how payment should be made.

The focus of our trip will be to carefully document the current situation, common goals and outcomes the school and community desires, and future plans. Please advise me on any specifics you might like us to put on the agenda. A plan will be drafted prior to departure from Enewetak. We will also develop a budget for implementing the plan.

We would prefer to work with a Marshallese translator rather than trying to make English-only conversation. You indicated that Jack might help us in this regard.

As soon as we have an itinerary, I will have it faxed to you. Please let me know of any other considerations.

Davor, I hope this is helpful.

cc: Dr. James Brough

Pacific Region Educational Laboratory
1164 Bishop Street, Suite 1409 • Honolulu, Hawaii 96813 • U.S.A.
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December 20, 1991

Mr. Phillip Muller
Minister of Education
Office of the Cabinet
P.O. Box 2
Majuro, Republic of the
Marshall Islands 96960

Dear Minister Muller:

Enclosed, please find a copy of a memo to Mr. Davor Pevec regarding PREL providing diagnostic and planning assistance to Enewetak. I wanted you and Secretary Maddison, via copy, to know of the planned response, and I trust you will be supportive. Should you or Secretary Maddison have any guidance or direction, please know I would welcome it. Our hope is we can help Enewetak document the current circumstances regarding elementary education and assist them in reaching consensus on steps they would like to take. At all junctures, we will ensure you are informed and consulted.

On another matter, Mrs. Rita H. Inos and I will be traveling to Majuro on January 10th to participate in the PIN meeting. At no time do we come to your islands without properly letting you know. Rita and I are hopeful your and Secretary Maddison's schedule will allow us an opportunity to talk about how PREL can be of greater service.

My best wishes for a very Merry Christmas and the happiest of New Years.

Very sincerely,

John W. Kofel
Executive Director

cc: Secretary Marie Maddison
Mrs. Rita H. Inos
[redacted]

Pacific Region Educational Laboratory
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February 3, 1992

MEMORANDUM

TO: Davor Z. Pevec

FROM: John W. Kofel

RE: Enewetak Visitation

This is to confirm the planned visit of two senior staff members of the Pacific Region Educational Laboratory (PREL) to Enewetak. Some of the specifics are as follows:

Purpose

The purpose of the visit to Enewetak is to collaboratively work with community and educational leaders and staff to:

1. Identify and comprehensively describe the current context for educating Enewetak's elementary children
2. Identify priority issues and desired outcomes for the educational system on Enewetak
3. Develop an initial action plan for addressing commonly held educational priorities and outcomes

Upon return to the PREL office, a further analysis of the visit and its outcomes will be made with a special emphasis being placed upon specificity of purpose, outcomes, and activities to be undertaken; related resource requirements; and possible funding sources to be jointly pursued.

Visiting PREL Staff

PREL will be sending two senior staff members to lead the onsite work. Both are very experienced in program planning, school reform, staff development, and parent/community involvement. The PREL staff are:

Ms. Karen Aka
Program Specialist

Ms. Fata Simanu-Klutz
Program Specialist

Visitation Dates

Karen and Fata have confirmed travel reservations that call for them to travel to Enewetak on Thursday, February 13, 1992, and leave Enewetak on Thursday, February 20, 1992.

Logistics and Cost

PREL will rely upon the Enewetak community to arrange and provide suitable housing and food at the combined daily rate of $28.00 per person. Ms. Aka and Ms. Simanu-Klutz shall make payment to the appropriate person prior to departure from Enewetak. All other costs shall be born by PREL. With your permission, Fata and Karen will be contacting you to schedule a session in which you can share information and help them better prepare. You can expect a call from them in the near future.

I hope this is helpful. Once again, we look forward to the opportunity to work with you and the Enewetak community. Thank you for your patience and understanding in the scheduling of this visit.

If I can be of any further assistance, please let me know.

cc: Ms. Rita H. Inos
Ms. Karen Aka
Ms. Fata Simanu-Klutz

APPENDIX C

School Staff

ENEWETAK SCHOOL
Principal Simon Aigni

Teachers' Name	Grade Levels	Degree/Level of Education
Airen John	Level 1	9th Grade- TTTAP Summer Program, Majuro
Jacqueline John	Level 2	TTTAP Summer Program, Majuro
Jonaline Heckerz	Level 3	Incomplete College
Hiram John	Level 4	Not Known
Simon Aigni	Level 5 and 6	A.S. - CMI; Coursework towards a B. A. through University of Guam and University of Hawaii
Jebra Ned	Level 7	A.S. Pohnpei, CCM (CMI)
Jorlang Gideon	Level 8	A.S. - CMI
Ismo Anjerok		High School Diploma - TTTAP Summer Program

MEDREN SCHOOL

Teachers' Names	Grade Level	Degree/Level of Education
Aichy Aisek		A.S. - CMI
Daiwal Relang		9th Grade Education

HEAD START PROGRAM

Teachers' Names	Positions
Metty Joram	Coordinator/Teacher
Neikoman Hernest	Teacher

APPENDIX D

Questions Asked of Teachers, Government Council, and Parents

ENEWETAK EDUCATIONAL DEVELOPMENT PLAN

Questions for the Teachers:

1. What do you think education should do for the students of Enewetak?
2. What should students look like at the end of eighth grade?
3. What would you like the schools in Enewetak to do and be like? (Philosophy, goals and objectives.)
4. What is expected of you as an educator? (Distribution of time spent teaching what.)
5. What do you view as the strengths and weaknesses of the school or education?
6. What language is used primarily for instruction? (Is instruction in large group or small group?)
7. What other factors can you identify that effect education or schooling? (i.e., curriculum, nutrition, training, culture, student services.)
8. What staff development opportunities do you have?
9. What kind of homework do the students receive?
10. What do they want or need vs. what are they getting?
11. Where do the students take the entrance exam?
12. How do you interact with the parents and community? (Open house, parent conferences.)

Other information needed:

- Attendance of the students
- Attendance of the teachers
- Flow chart of responsibility
- Student services
- Classified staff

ENEWETAK EDUCATIONAL DEVELOPMENT PLAN

Questions for the Enewetak Government Council and Parents:

1. What do you think education should do for the students of Enewetak?

2. What would you like the school in Enewetak to do and be like?

What do you view as the strengths and weaknesses of school and education in Enewetak?

What other agencies service your children and what is the relationship between those agencies and the Council?

How is the budget for the school handled?

APPENDIX E

Nutrition Report

A NUTRITION EDUCATION SERIES

DEVELOPED FOR THE PEOPLE OF ENEWETAK ATOLL

Presented April 1991
Enewetak Atoll, Marshall Islands

by:
Mary H. Maifeld, M.A., R.D.
MM Health and Nutrition Consulting
Bozeman, Montana
United States of America

with
Language Translation and Technical Advisement by,
Dr. Laurence M. Carucci
Montana State University
Bozeman, Montana
United States of America

Contents

Section 1: The Need for Protein and its Sources

Section 2: Necessary Vitamins and Minerals for Protection from Disease

Section 3: Nutrition for Pregnant Women, Breastfeeding Mothers and Young Children

Section 4: How to Control the Disease of Diabetes Mellitus through Dietary Measures

Section 5: Nutritional Comparison of Traditional and Western Foods

Section 6: Suggestions for the Council to Implement to Prevent Malnutrition on Enewetak Atoll

Food and the Body

In modern times there is usually plenty of food available, even when the weather is not good. Foods are preserved in cans and packages, and sold in stores. Stores sell many different kinds of foods, so you can eat many new foods that were not available to your ancestors long ago.

Some people think that most foods are about the same, and that the body will be healthy if the stomach is kept full. This is not true. Foods are made up of different parts, called **nutrients**. Some foods have one kind of nutrient, while other foods have different kinds of nutrients. To be healthy, the human body must have many different kinds of nutrients, found in many different kinds of foods.

Nutrients can be grouped according to how the body uses them into the following groups. Proteins are used for body-building and repair. Carbohydrates, fats, and oils are used for energy and warmth. Vitamins and minerals are used for protection from disease.

Proteins

Our bodies are built of very small pieces called **cells**, in the same way that a village is made up of houses. Cells are mostly made from protein just as houses are mostly made from wood, tin or thatch. Throughout life, cells in the body are continually being broken down, replaced, and built up again. All of the tissues of the body are continually wearing out and being replaced; you can see it happening in the skin, hair and nails, and the same is happening inside the body in the intestines, blood and all the other parts. In this case, protein is used for repair.

Protein is also used for building a body, such as when a child is created inside a woman's body. A child's body is made up of cells, also. Therefore, a pregnant woman must have plenty of protein if she is to have enough for herself as well as enough for the child that is growing inside her. When a child is born, his body, and especially his brain, go on growing. A child needs protein to grow tall and to become smart. Children especially need body-building foods to provide materials for the growth of the child's body. Mature men and women do not need protein for their personal growth, but pregnant and breast-feeding women need protein to feed the child.

When a child becomes an adult, he stops growing. An adult no longer needs protein for growing, but the different parts of his body are wearing

out all the time. Protein is still needed for repair. If you wear a pair of zorries or shoes for a long time, the soles will wear out. But if you do not wear zorries, the bottom of your feet do not wear out. This is because new skin cells are being made all the time underneath the old skin. The hard skin that touches the ground is being worn away, but new skin is growing all the time to repair it. After you have cut your hair, it grows again, and the new hair is made out of protein. When you cut or burn your skin, the hole in your skin is repaired in the same way by new cells made out of protein. In much the same way, when the body is harmed by an illness, such as the flu, diarrhea or diabetes, some of the cells inside the body are harmed and wear out faster than usual. This is easy to see in children, who often get thin and stop growing when they are sick. All sick people, but especially sick children, therefore, need extra protein to repair the harm done by sickness.

You may ask, "Which foods are best for body-building and repair?" The best protein foods come from animals. Such foods as fish, pork, chicken, wild birds, beef, turtle, corned beef, eggs, sardines, and milk are good sources of body-building and repair type proteins.

How much protein do we need? An adult needs one to two servings of protein each day. One serving is the size of a deck of cards, or one small fish (*moli or jo*). Children need three or four servings of protein every day to grow and become smart. Pregnant and breast-feeding women also need three or four servings of protein each day because they are building a child. Children and pregnant and breast-feeding women, therefore, need much more protein than do other adults.

When a child does not get enough protein, his growth will slow down. He may be short. His brain will not grow and he will not be smart. Children like this can easily get diseases, infections of the skin, diarrhea, runny noses, and coughs. Once the child becomes sick, the body needs more protein for repair as well as for growth. Without enough body-building foods, such as fish, meat, milk or eggs, a child cannot grow well and can die.

Pregnant women also hurt their child if they do not get enough protein. Sometimes, the unborn child does not grow to a normal size. A woman will have problems during the pregnancy or delivery, and the baby may be born dead.

When a woman is breast-feeding a baby, she needs to eat three to four servings of protein each day. If she does not get this protein, her milk may not be strong enough to help the child grow and become smart, or she may not have enough milk to feed the baby. Therefore, pregnant and breast-feeding women must eat enough body-building protein foods if they want to make strong babies.

Adults

Body-building foods:
Two large spoonfuls of fish or meat, or two eggs

Protective foods:
Green vegetables
Fruit according to appetite

Energy foods:
Root vegetables or rice (amount according to work)

Pregnant and Breast-feeding Women

Body-building Foods:
Three large spoonfuls of fish or meat, or three eggs
A large cup of milk, or soup

Protective foods:
Large serving of green vegetables
Large cup of fruit juice or coconut water
A piece of fruit between meals

Energy foods:
Root vegetables or rice (amount according to work)

FAMILIES SHOULD TRY TO HAVE AT LEAST ONE, AND PREFERABLY TWO,

GOOD PROTEIN MEALS LIKE THESE EVERY DAY

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Vitamins and Minerals for Protection from Disease

As an example, a house is made of tin, and our bodies are made of cells, which are mostly made of proteins. When a house is built, a few other things are needed besides tin, and the energy to do the building. We need wood, nails and a lock to fasten the door. A lock is an important part of a house to keep it safe. In the same way the body needs a few special things if it is to work well and stay healthy. These special things are vitamins and minerals. The body cannot make vitamins or minerals. We must get them from the foods we eat. (See New Pacific Nutrition by Nancy Rody, R.D.)

Vitamins are named after the letters of the alphabet, such as vitamin A, vitamin B, vitamin C, etc. Many of the important vitamins are found in fresh foods like fruits, vegetables, fish, meat and milk. Many foods contain vitamins and minerals as well as protein and energy foods such as breadfruit and pandanus.

Vitamin A

If a person's eyes and skin are going to stay healthy, there must be some vitamin A in their food. Young children will not grow well if vitamin A is lacking in their food. Vitamin A protects the body from infections by helping to form strong cells in the skin, mouth, throat, stomach and intestines. Vitamin A helps in the process of sight. People who do not get enough of this vitamin have difficulty seeing in the dim light of morning and evening. If the person has even less vitamin A, the clear front part of his eyes will be harmed and he may become blind.

Vitamin A is found in the liver of fish, turtle, pork, beef or chicken, in fatty fish, fish eyes, milk, eggs, pumpkin, sweet potato, pandanus, papaya, the orange types of breadfruit, mango, guava, and green leaves like the tops of sweet potatoes, pumpkins, and taro. Every person needs to eat one of these foods every day to protect them from infections, and to help their skin and eyes grow well and be healthy.

Vitamin C

This vitamin is found in many fruits, such as oranges and limes, and in green vegetables. If a person does not get enough vitamin C in their food, the body tissues become weak and bruise easily. The gums (the parts of the mouth that hold the teeth) may swell up and bleed, and the teeth can become loose. Internal bleeding may take place. A disease called **scurvy** can develop if you do not eat enough vitamin C foods.

There is vitamin C in breast milk when the mother has plenty of vitamin C in her food. It is possible for bottle fed babies to develop scurvy,

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however, if they are not given fruit juice every day. Sometimes elderly people or sick people get into the habit of eating soft foods like bread or rice and coffee. These kind of meals may lead to scurvy. When people are not able to eat vegetables or raw fruit, they should drink some fruit juice every day.

People who live on coral atolls cannot grow many fruits and vegetables. They can get vitamin C by eating a lot of green coconut and sprouting coconut, because vitamin C develops during the sprouting of seeds. They can also get vitamin C from sweet (unfermented) jekero. This is an important health drink for people who live on atolls.

Foods which have high amounts of vitamin C are papaya, pineapple, orange, lime, guava, mango, green leaves, tomato, and jekero. Fair sources of vitamin C are green coconut, sprouted coconut, ripe bananas, root vegetables such as pumpkin, bean sprouts and all other fresh vegetables and fruits. Atoll people should be encouraged to grow these foods in their gardens.

You may ask how can we get enough vitamin C? Eat some raw fruit every day, especially papaya, pineapple, orange, limes, guava, or mango. Eat one serving of green vegetables every day. Pregnant and breast feeding mothers should eat extra servings of raw fruits and green vegetables every day. To get the best value from vitamin C foods, eat fruits and vegetables raw when possible.

Minerals

Minerals are found in the soil, in sea water, and in rocks. During growth, plants take the minerals they need from the soil for the growth of leaves, stems, roots, flowers, and seeds. If a needed mineral is not in the soil, the plant will not grow well. People and animals get the minerals they need from plant food and from water. Minerals are used for building bones, blood and other important parts of the body.

Iron

Iron is a necessary mineral for the human body. Iron builds strong blood and makes you breathe easier. If there is not enough iron in the food eaten, the body cannot make strong blood. The blood becomes thin, pale and weak. A disease called **anemia** can happen. Women are especially likely to get anemia. This is because there is iron in blood, and each month a woman loses some blood each month in her menstrual period. A pregnant mother may also not have enough iron because it is needed by the child inside her body. During the years a woman can have babies, she will need more iron than any man.

KWOJ BOK JEN IA VITAMINS?

Armij in raan kein rejale kin vitamins. Im rejale bwe vitamin ko rej aurok ñan ejmour.

. . . AK . . .

TA IN JUON VITAMIN?

KILEN KE REJ JERBAL ILO ENBWININ JUON ARMIJ?

KWOJ BOK JEN IA VITAMIN?

. . . . . .

	aet	jab
KWOMARON LOE VITAMIN	[ ]	[✓]
EWOR KE VITAMIN ILO AOLEP KAIN MONA	[ ]	[✓]
JUON WOT KAIN VITAMIN	[ ]	[✓]
JUON WOT KAIN JERBAL NAN VITAMIN	[ ]	[✓]
KWOJ BOK VITAMIN JEN MONA	[✓]	[ ]
VITAMIN KO REJ KEJBAROK ENWININ JEN NANINMIJ	[✓]	[ ]

. . . . . .

EWOR VITAMIN A
VITAMIN C
VITAMIN D
VITAMIN E
VITAMIN B_1, B_2, B_3, B_{12}

VITAMIN A:
Ej kejbarok mejed im kilid. Ejabwe Vitamin A kwomaron bilo.

VITAMIN C:
Ej kejbarok kilid. Elane ejabwe Vitamin C enaj bidodo ñad im emaron botoktok. Emaron jorren kilid.

VITAMIN D:
Ej kakajut dri im ni. Elane ejabwe Vitamin D e enaj mojno dri im ni.

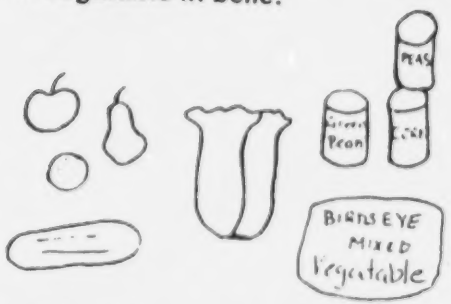
VITAMIN B KO:
Rej likit jale in enbwinin ej kejerbale mona ko kwoj kani. Ejabwe Vitamin B ko ej koman jorren in kilid.

Elane kwoj mõñã mõñã ko rekããl im elõn vitamin ie, kwoj jab alkuij inebata kin vitamin ko jet. . . . . .

KINKE Elane kwoj kõlet mõñã ko rekããl im remõn, ewor aolep kain vitamin ie.

1. Elabtata vitamin ko rej bed ilo mona in Majol — Elon vitamin ie. Kappok mona in Majol.

2. Elane ejelok mona in Majol, einwot ilo Center ko, mona vegatable ilo kuat im vegatable in belle.



3. Ajiri elabtata an aikwij vitamin bwe en maron emõn an rüttolok im emõn an mour.

4. Elane ej to an komat mõñã ejako jet vitamin. Kein menin emõn steami mõñã ak jidrik wõt an komat.

5. Kwomaron bok vitamin D jen al kojeje enbwinim.

Anemia is also a common disease among people who have hookworm, because the worms drink the blood from human bodies. Good food will not help the cure this disease until the hookworms are gone. In areas where hookworm is common, do not go barefoot or allow children to do so. The worms enter the body through the soles of the feet.

How much iron should we eat in a day? One or two servings of meat, fish or shellfish should be eaten daily, especially by young women. Pregnant and breast-feeding women should eat extra servings of meat, fish, shellfish, and green vegetables, such as the tops of sweet potatoes, squash, taro and pumpkin.

Vitamin C helps the body use the iron in the green vegetables we eat. Therefore, high iron vegetables such as cooked green leaves should be eaten in a meal with foods high in vitamin C such as oranges, limes, papaya or jekero. A small amount of meat or fish eaten with cooked green leaves, or a soup made out of meat and green leaves also helps the body use the iron in these types of foods.

Fluoride

This mineral is important to make strong teeth and bones. Water in some parts of the world contains fluoride, and people who drink this water have very good teeth. Unfortunately most of the water in the Pacific does not contain very much fluoride. Traditional foods such as taro, coconut, and fresh fish contain fluoride, so people used to get their fluoride this way. Now that more processed imported foods are being eaten, people do not have teeth that are so strong as people used to have. They are getting more holes in their teeth, called cavities. There are other things which are also causing cavities in teeth, such as sugar and soft drinks. Sugar and sweet foods cause the teeth to rot, hurt, and eventually fall out.

Empty Foods

Some food such as candies and soft drinks (*kola*) contain nothing but sugar, flavorings and water. Apart from the sugar and water, they contain no nutrients at all. These are called **empty foods** because they contain none of the important vitamins, minerals or protein needed by the body.

Soft drinks are not a nutritious food. These foods are very expensive. Some people think they are buying useful food when they buy these things. Children are sometimes given these foods for their meals. This is sad, because it would be much better to spend the money on some milk for the child. Empty foods also help cause the teeth to rot and get holes in them. This is one of the reasons that the teeth of many Marshall Island children

one per day--**not more**. The mother needs to still eat complete nutritious meals, even if she is taking a vitamin pill. All medicines and pills that she takes will affect the baby. Any alcohol or drugs that a pregnant woman eats, drinks, or smokes will hurt the growing baby inside her. Therefore, **never take drugs or drink beer or bottle when you are pregnant or breast-feeding**.

Breast-feeding

The best way to feed a baby is by the mother's milk. It is not possible to produce a bottle of milk or formula that is as good as breast milk. Breast-feeding is best.

The mother's milk has nutrients in exactly the right amounts needed by that particular baby for growth and health, and it is best suited to the baby's digestive system. Human milk is meant for baby humans just as cow's milk is meant for baby cows. Canned or boxed milk comes from cows and is too hard on a baby's stomach to give to him until he is at least one year old. It is hard to digest, and therefore, bottle fed babies are often constipated. Bottle fed babies are also more fussy (colicy) because they swallow more air than a breast fed baby.

Breast fed babies are healthier, because breast milk protects the baby from illness and some diseases. Breast fed babies are healthier because they don't get allergies from the mother's milk, where they can from a formula or from cow's milk. Breast fed babies do not get intestinal infections with the accompanying vomiting, diarrhea and serious weight loss as a bottle fed baby can. Diarrhea and vomiting can kill a baby when it becomes dehydrated or does not get enough water.

Breast fed babies are livelier, walk earlier, and accomplish higher grades in school and on intelligence tests.

Breast-feeding helps protect the teeth of the baby. A bottle at bedtime or when falling asleep may cause the teeth to soften and rot. It is the sugar in the formula, fruit juice, or soda pop (*kola*) which bathes the teeth and causes them to decay.

Not only does breast-feeding help the baby be healthier, but it helps the mother also. The baby's sucking helps the uterus to contract and prevent bleeding. It protects against cancer of the breast. Breast feeding helps the mother to resume her prepregnancy shape.

If the mother bottle feeds, it is much easier for the baby to get the milk, because it falls out of the bottle. When a baby breast feeds, however, he has to work to get the milk out of the breast. The muscles in the baby's cheeks are the strongest muscles at birth. They are strong to help the baby suckle.

When a woman breast-feeds her baby, it is much easier and much less work than bottle feeding. No one has to sterilize bottles, boil water or

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make formula all during the day and in the middle of the night. There is no waste with breast-feeding because the baby drinks just as much as she wants. **When bottle feeding, however, whatever is not drunk at a feeding, must be thrown away.** Formula is expensive. In the Pacific, the cost of correctly bottle-feeding a baby is $600.00 a year or more.

Mother's Milk

The liquid that comes out of the breast in the first few days after the baby is born, is called **colostrum**. It is creamy white to a light yellow in color. The colostrum is good for the baby to eat because it is full of special substances that protect a baby from many diseases and illnesses.

The milk comes into the breast about 2 to 4 days after the baby is born. It will look thin, bluish and watery. This is the way it should look. The first part of the milk, called the fore-milk, has more water in it to help decrease thirst. The second part of the milk, called the hind-milk, has more fat and nutrients in it for the baby's growth.

The more the baby sucks, the more milk is made. If the baby doesn't suck well or misses a feeding, the breast will think it has too much milk and not make as much. Therefore, nurse the baby at least every three to four hours for 10 to 15 minutes each time. It is important to nurse the baby from both breasts. Start with the breast that you last nursed on. The sucking is more vigorous when they begin to eat. Nursing on both sides will help prevent one of the breasts from becoming sore.

If one of your breasts get infected, hard and sore, it is called **mastitis**. Mastitis is caused by a milk duct, or milk tube, that gets clogged. It is important to continue to breast-feed from that sore breast, because continuing to breast-feed will open the duct. When you are not breast-feeding, use warm, moist cloths on the sore spot to help open the clogged duct. If it hurts to nurse on that breast, let the baby start sucking on the other breast first, when the baby sucks the hardest. Then when the baby sucks less hard, let him suck from the sore breast.

To make enough milk, a mother needs to follow these three points: 1) Drink plenty of fluids. Milk is especially important for a breast feeding woman to drink because of the protein, vitamin A and minerals in it that she needs. 2) Get plenty of rest. When the baby goes to sleep, the mother should also sleep, if she can. 3) Eat good food full of vitamins, minerals, and protein.

Breast-feeding helps the mother lose the weight she gained during pregnancy. The extra fat that was stored and left on her body after the baby was born, is there for the mother's body to use to make milk. Breast-feeding uses up this stored fat. If a woman does not breast-feed, that stored fat remains on the mother, making her less fit.

In some places in the Pacific Islands, women are beginning to become embarrassed to breast-feed. Breast-feeding is a good thing to do anytime in any place. It shows what a good mother you are and how much you love your baby.

Ancient Marshall Islands' mother's knew that the best way to feed a baby is by breast-feeding. They were right.

Treatment for Sore Nipples

What should you do if your nipples get sore when you breast-feed? Pull out the nipples firmly, but only until it becomes uncomfortable, not painful. Put a small amount of coconut oil on each nipple and roll it back and forth to toughen them. After each breast-feeding, expose the nipple to the air to dry it. Wear soft clothes. Breast-feed more often--every two hours. Still feed from both breasts, but only for five minutes each time.

When the Baby is Sick

Sometimes, a baby gets sick. It is very important to continue to breast-feed when this happens. Breast milk is the best food. Besides breast-feeding, if the baby is five months or older, give it fruit juice such as pineapple or orange juice to stop the runny nose and coughing. The fruit will help cure any other diseases, and will help keep the baby from getting sick the next time. Before you give a baby any kind of medicine, even aspirin, see a doctor first. Never give a baby medicine meant for someone else unless the doctor says it is okay first. If you are not breast -eeding, continue feeding the baby the correctly mixed formula the entire time he is sick. Good nutrition is essential to help keep a baby from getting sicker and to get it well again when it gets sick.

Bottle Feeding

Sometimes, a mother lacks the self confidence to breast feed. The reflex that lets the milk come down into the breast is very sensitive. It can be easily upset by fear, pain, uncertainty or criticism, as well as the belief that you do not have enough milk. For the mother who cannot or will not breast feed, do not use a boxed or canned milk from a cow, including evaporated canned milk. Use a formula meant just for infants, and mix the formula correctly. Do not add extra water. Doing so will prevent the baby from growing normally.

If you have chosen to feed your baby with a bottle, you must keep several rules in mind whenever preparing a bottle.

1) Wash your hands well with soap. Wash the bottle with soap and everything to do with the bottle

2) Boil a big pot of water. Put the bottles, nipples, measuring cups and spoons into the boiling water. Leave them there for five minutes.
3) In a separate pot, boil fresh water for five minutes.
4) Wash your hands again with soap before you touch any of the clean boiled items.
5) Now add the correct amount of formula and the correct amount of boiled water to the freshly boiled bottles. Don't add more water than the instructions tell you to add.
6) Put the hot nipple onto the clean bottle and screw on the top.
7) Cover the clean bottle and put away some place where no animals, children or insects will touch it.
8) When the bottle of milk has cooled to body temperature, feed the baby.

The feeding bottle must be kept very clean. Each time the baby is fed, any leftover milk must be thrown away or put into a cup and given to an older child. Never save milk from one feeding to use for the next. It will be full of germs, because germs love to grow in milk. It is very important to fix a new bottle of milk every time the baby is fed. The bottle must be washed with clean water and soap first, and then boiled for five minutes to kill all the germs. The germs will be killed by the hot steam when the bottle and nipple are boiled. A bottle and nipple should be kept in the pan they were boiled in, with a lid on top, set aside where no children or animals can reach it, until it is time to mix the next feeding. The bottle should never be allowed to lie around on the floor or ground. Baby bottles must be kept very clean.

How Much Milk Should the Baby Drink?

Bottle feeding goes wrong most often because babies do not get enough milk. This is because either the milk is watery and weak, or because the baby is not fed often enough. It is very important to **mix the formula correctly**. Do not add more water than the directions state. A newborn infant needs as much milk as 4 ounces, five times each day. A five month old baby needs 8 ounces of milk, five times each day. A breast fed baby should nurse every three to four hours for 10 to 20 minutes each time. All babies need to be fed **at least** five times a day.

The major cause of death in infants is from not getting enough milk or fluids. This is called dehydration. One way to tell if a baby is getting enough milk, is if he urinates eight to ten times each day (or has 8 to 10 wet diapers).

A baby should always be held when feeding him a bottle. Never put a baby to sleep sucking on a bottle. The sugar in the formula, tea, juice, or cola coats the baby's teeth, and causes them to begin rotting. Eventually the

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Juon 'menu' nan waanjonak
Ajiri: 6-9 allon

JUON AJIRI EO LE MONONO IM EJMOUR EJ MONA MONA KEIN AOLEP RAAN!!

MONA KO ILO KURUP IN KANNIEK

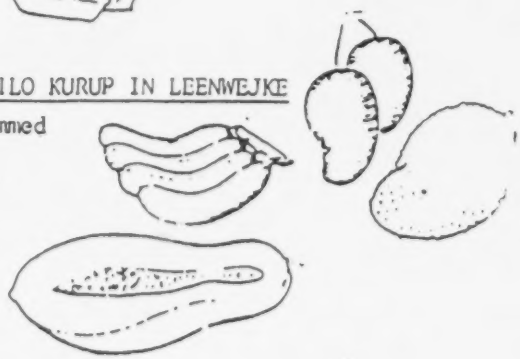
Lep
Bao
Ek im mona in lojet ko jet
Jelele ilo kuwaat
Piik

MONA IN JIBBON

Ninnin ibben jinen
4 tabelspuun in leenwejke
4 tabelspuun in mona makmok ko

MONA KO ILO KURUP IN LEENWEJKE

Binana emmed
Mango
Keinabbu
Laim
Oran



KOTAAN AWA

Ninnin ibben jinen
8 tabelspuun in leenwejke

MENIN EDDREK KO

Jubub in panke
Billoken kotak
Panke
Kangkong
Karteb
Cabbage

MONA IN RAELEP

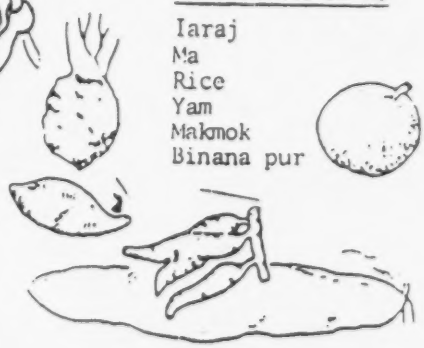
Ninnin ibben jinen
4 tabelspuun kaniek
4 tabelspuun menin eddrek (vegetables)
4 tabelspuun in mona makmok ko

MONA IN JOTA

Ninnin ibben jinen
4 tabelspuun in kaniek
4 tabelspuun in leenwejke ak menin eddrek ko
4 tabelspuun in mona makmok ko

MONA KOMAKMOK KO

Iaraj
Ma
Rice
Yam
Makmok
Binana pur



1. AJIRI EO EMARON NINNIN IBBEN JINEN TOON WOT AN JINEN MARON KANINNINI.
2. JAB LELOK AK NAJIDRIKI AJIRI EO MONA KO EJELOK TOKJEN....COLA, CHEESE BALLS, LOLLE, ICE CANDY....MONA KEIN EJELOK ON IE IM REJ KOMMAN NI MAK.

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2) Boil a big pot of water. Put the bottles, nipples, measuring cups and spoons into the boiling water. Leave them there for five minutes.
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The major cause of death in infants is from not getting enough milk or fluids. This is called dehydration. One way to tell if a baby is getting enough milk, is if he urinates eight to ten times each day (or has 8 to 10 wet diapers).

A baby should always be held when feeding him a bottle. Never put a baby to sleep sucking on a bottle. The sugar in the formula, tea, juice, or cola coats the baby's teeth, and causes them to begin rotting. Eventually the

teeth will fall out before they should. This can make the permanent teeth come in crooked and cause a permanent chewing problem.

Foods for Young Children

Between four and six months of age, most babies begin to need other foods. Bottle fed babies at four months and breast fed babies at six months need other foods besides milk.

Remember when you feed your baby with a spoon for the first time, neither of you may know what to do. The baby has only been used to sucking a warm, soft nipple. He may be confused as to what he is supposed to do when he feels a hard spoon on his mouth. Give only a bit of food on the tip of the spoon at first. If he spits it out, do not force him to eat. The baby will soon learn what is expected. Keep in mind that at first you are merely teaching about new foods, not trying to fill up the baby.

Fruits are good first foods for babies. Begin with one or two teaspoons (*jipun jidikdik*) of the developing meat of a drinking coconut (*mede*), mashed sprouted coconut (*iu*), mashed ripe banana (*binana*) or ripe papaya (*kinampu*), and gradually increase the amount as the baby gets older to one and then to two tablespoons (*jipun eo elap*) per day. Offer the solid foods before the milk when your baby is hungry. When she is finished with the fruit, then give her the breast or bottle of milk. The baby will let you know when she has had enough food by turning her head away, closing her mouth, or spitting out the food.

Fresh foods are best. To make fruit juice, mix one part fruit juice with one part water (water which has been boiled for five minutes and cooled first) to put into the baby's clean and sterilized bottle. You can make fruit juice by mashing mangoes, papayas, bananas, tomatoes, pineapple or oranges and adding boiled, cooled water. Mix it together well, and strain it. Then, put the juice into a clean, sterilized bottle and feed it to your baby. Jars of baby food are expensive to buy in the stores but they are safe to use and have no germs in them. Do not add sugar or salt to baby foods that you make or those that come in a jar. The baby does not need it, and they can harm your baby.

In another one to two months when your baby is five to seven months old, start giving her vegetables and starches. Mash and strain vegetables such as pumpkin, sweet potato, carrots, green beans and vegetable tops from pumpkin, sweet potatoes, and taro. You can also try mashed starches such as rice, breadfruit, or yams mixed with a little milk.

In a few months a baby is ready to try vegetables and starches. Vegetables that are good and not much work to mash or strain are:

Pumpkin
Yellow sweet potato
Carrots
Young green beans and wing beans
Green leafy vegetables such as pumpkin tips, kangkong, sweet potato leaves, Chinese cabbage or taro tops.

You can also now try mashed starches such as taro, rice, breadfruit, or yams, mixed with a little milk.

By six months, give some soft-cooked egg yolk (the yellow part) every second day. Don't give the white part of the egg yet.

FOOD GUIDE FOR 4-6 MONTHS

The baby should be eating these foods every day.

Early Morning:

2 tablespoons mashed fruit or juice
2 tablespoons mashed starch
Breast milk

Mid-Morning:

Breast milk

Noon:

2 tablespoons mashed fruit or juice
1 tablespoon mashed egg yolk (every second day)
2 tablespoons mashed vegetable or soup made with vegetables
Breast milk

Mid-Afternoon:

Breast milk

Evening:

2 tablespoons mashed fruit or juice
2 tablespoons mashed vegetables or soup made with vegetables
2 tablespoons mashed starch
Breast milk

Night:

Breast milk

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FOOD 6-9 MONTHS

The baby should continue to eat the same kinds of foods, but the amount should be increased. Now is the time to start with fish and meat. Mash up fresh or canned fish with the other foods. Make it soft with the water vegetables are cooked in. This water is very rich in vitamins.

You can give the baby canned meat chopped up very small, or you can scrape uncooked meat with a knife, cook it and mash it with other foods.

FOOD GUIDE 6-9 MONTHS

The baby should be eating these foods everyday.

Early Morning:

¼ cup mashed fruit
¼ cup mashed starch
¼ cup soup made with vegetables
Breast milk

Mid-Morning:

½ cup mashed fruit or fruit juice
Breast milk

Noon:

¼ cup meat or fish, or whole soft cooked egg
¼ cup mashed vegetables or soup made with vegetables
¼ cup mashed starch
Breast milk

Evening:

¼ cup meat or fish, or whole soft cooked egg
¼ cup mashed fruit or vegetables or soup made with vegetables
¼ cup mashed starch
Breast milk

Bedtime:

Breast milk

Give cooled boiled water between meals if it is a very hot day.

BABY SHOULD TRY TO FEED HIMSELF

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FOOD 9-12 MONTHS

Baby can now use his new teeth to chew food. Chop the food instead of mashing it. He still needs to eat more often than the rest of the family. Feed the baby four or five times a day. Continue to follow the 6-9 month **Food Guide**, but gradually increase the amounts.

These are the foods that are good for your baby and provide the nutrition he needs to grow strong and healthy.

- Every meal, have one of the **body-building** foods, at least one of the **energy** foods, and one or more of the **protective** foods.
- The **body-building** foods - milk, fish, meat, chicken, eggs.
- The **energy** foods - taro, rice, breadfruit, bananas, coconut, yams, sweet potatoes, bread, tapioca, pandanus.
- The **protective** foods - vegetables and fruits such as papaya, kangkong, mango, taro tops, chinese cabbage, eggplant, pumpkin, sweet potato leaves, carrots, green beans, tapioca leaves, pumpkin tips, soursop, etc.

Be sure the baby eats these good foods before he is given sweet foods such as cookies or puddings. If he is full of sweets, he may not eat enough nutritious foods to stay healthy.

At one year, the baby can eat almost all the foods that the family eats. Family meals should include foods from the body-building, the energy and the protective groups. This will keep the baby and the whole family healthy.

FOOD GUIDE 9-12 MONTHS

Early Morning:

¼ cup fruit or juice
¼ cup starch food
¼ cup soup made with vegetables
Breast milk

Mid-Morning:

½ cup fruit or juice
Breast milk

Noon:

5 tablespoons meat or fish, or 1 egg
¼ cup vegetables or soup made with vegetables
¼ cup starch food
¼ cup fruit or juice
Breast milk

Evening:

tablespoons meat or fish, or 1 egg
¼ cup vegetables or soup made with vegetables
¼ cup starch food
¼ cup fruit or juice
reast milk

Bedtime: Breast milk

FEEDING THE OLDER CHILD

FOOD 1-6 YEARS

Food amounts for children over one year old vary according to the child's height, weight and activity. The following food guide can be used as an estimate.

	Age 1-3	Age 3-6
Early Morning:		
Fruit or juice	½ cup	¾ cup
Soup made with vegetables	¼ cup	½ cup
Starch Food	¼ cup	½ cup
Milk	¾ cup	1 cup
Mid-Morning		
Milk or juice	¾ cup	1 cup
Noon:		
Meat or Fish	5 tablespoons	6 tablespoons
Vegetable or soup made with vegetables	¼ cup	½ cup
Starch Food	¼ cup	½ cup
Fruit or juice	¼ cup	½ cup
Milk	¾ cup	1 cup
Evening:		
Meat or fish	5 tablespoons	6 tablespoons
Vegetable or soup made with vegetables	¼ cup	½ cup
Starch Food	¼ cup	½ cup
Fruit or juice	¼ cup	½ cup
Milk	¾ cup	1 cup
Bedtime:		
Milk or juice	¾ cup	1 cup

By the time your baby reaches six to nine months old, give your baby a few tiny bites of soft cooked fish or meat every day. Give some soft-cooked egg yolk (only the yellow part) every other day. Do not give the white part of the egg until the baby is one year old.

Around six to nine months, begin to let the baby hold his bottle or food in his hands. Start with soft fruit, such as banana or papaya, that he can eat with his fingers and then go onto spoon feedings next. About seven or eight months, offer milk or juice from a cup one to two times a day. By one year of age, your baby should not need a bottle any longer. Begin chopping food instead of mashing it when she is nine to twelve months old. By one year, she may be able to feed herself, and can eat the rest of the foods that the family eats.

Remember, at **every meal** to feed your baby.

1) **Protein foods** for body building and repair. Foods such as peanut butter (*pinot bota*), egg yolk, fish (*ilk*), meat (*kao, pilk*), chicken (*bad*), and milk are good sources.
2) **Energy foods** such as rice (*reif*), taro (*iaref*), flour or bread (*bilawa*), breadfruit (*ma*), and
3) **Protective foods** such as fruits--drinking coconut (*ni*), sprouted coconut (*iu*), coconut sap (*jekero*), papaya (*kinampu*), banana (*binana*), pineapple, orange, mango and guava, and vegetables--carrots, sweet potato, pumpkin, green beans, and vegetable tops.

All three types of food are very important to keep your baby healthy and are needed at least **three to five times a day**.

Carbohydrates, Fats and Oils for Energy and Warmth

A car needs gasoline if it is going to move. When the car is moving, the gasoline is burned and used up. Gasoline is energy food for the car. In the same way, our bodies need energy foods if we are going to move and work. We are different from cars. When a car's motor is turned off, it does not use any more gas until it is turned on again. Our bodies use energy from food all the time until we are dead. While we are asleep, our hearts keep pumping, and we have to breathe and keep warm. This uses up some energy. When we move and walk around, we use up more energy. If we run or do heavy work, we use up even more energy, so we need plenty of energy food if we do heavy work.

Just as cars need gasoline to give them the energy to run, so our bodies need energy foods. There are two kinds of energy foods--carbohydrates and fats or oils. Most carbohydrates are root vegetables or

white powdery foods like sugar, flour or rice. For example, a man can use the energy of the carbohydrates in yams to give him the energy that he needs to dig.

It may surprise you to think that the body can "burn" food to make heat and energy. It really is burning, but it goes on so slowly that there is no smoke or flame, and our bodies become only slightly warm. Think how your body gets hot when you are doing heavy work. That is caused by the carbohydrates burning in your body to give you energy. A car motor burning gasoline gets hot when it is moving the car, and in the same way, we keep warm by burning energy foods. Our bodies are cooler at night when we are asleep, and get hotter when we are awake and work hard.

It has been mentioned that cells make our bodies just as houses make a village, and that proteins make cells as tin and wood make a house. Just as it is hard work and uses energy to build a house, so our bodies need energy to make cells out of protein. Children therefore, need energy for growing.

Protein builds cells while energy foods give us the energy to do the building. Therefore, a pregnant woman needs energy to give to her child who is growing inside her. A breast-feeding mother needs energy to put into the milk for the child she is breast-feeding. Children of all ages need the energy with which to grow, run and play, and to think at school.

Calories

Sometimes we want to measure energy. We want to measure how much energy a person needs to do a certain amount of work, or to run one mile. We also want to measure how much energy there is in each of the foods that we eat. We use **calories** to measure energy in the same way that we use pounds to measure weight, and feet or yards to measure length. The calorie is said to be the unit of energy in the same way that the pound is the unit of weight, and the foot is the unit of length.

It has already been said that most foods are mixtures of nutrients and that some foods contain more protein than others. In the same way, some foods contain more carbohydrates or fats than others. Because most foods are mixtures of nutrients, many of them contain both protein and carbohydrates, such as taro. We call some foods energy foods because they contain more carbohyrades or fat than protein.

A little bit of fat is good to add to children's food because their stomachs are too small to hold enough rice or flour to give them all the energy they need for play and for growth. By putting fat or oil in their food, their stomachs will be able to hold enough energy to help their bodies grow strong.

Adults and old people (*rutto*) who eat a lot of fatty foods, smoke and have little exercise, are likely to build up fatty deposits along the inner

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walls of blood vessels in their bodies. This fat in the walls of the blood vessels can eventually block the flow of blood to the heart which can cause major damage or kill it. These people can suffer from high blood pressure, which also can cause heart attacks. The risk of heart attack can be reduced by not smoking, by losing weight, by increasing exercise and by closely watching what you eat, especially by eating less fatty foods

Carbohydrates, fats and oils provide only energy. They cannot be used to build bodies because they do not contain protein. For example, if a child is fed almost nothing except carbohydrate foods like rice or flour, he will not grow. The rice or flour will only give him the energy to run and play. Because these foods contain so little protein, they cannot build and repair a child's body. However, traditional foods such as tapioca, taro, and sweet potatoes have several advantages that western foods like rice and flour do not have. 1) They have protein and carbohydrates. 2) They are easy to grow. 3) You can eat the leaves, tops, and roots. 4) The tops or leaves have many vitamins and minerals; many more in fact, than the roots do.

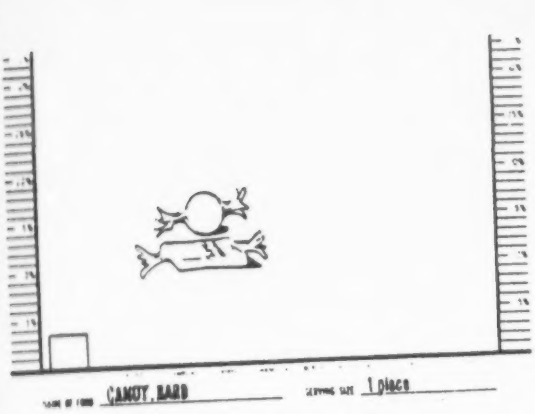
Nutritional Content of Traditional versus Western Foods

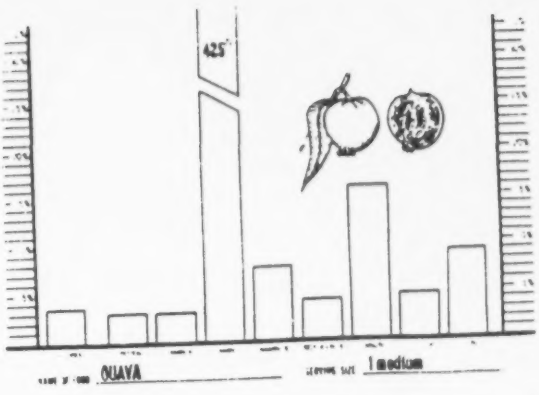
Enewetak people get a high proportion of their energy from foods such as rice or flour. These do not have many nutrients. Traditional Pacific foods, however, have a lot of very necessary nutrients, vitamins and minerals. Such foods are breadfruit (*ma*), pandanus (*bod*), drinking coconuts (*ni*), sprouted coconuts (*ru*), coconut sap (*jekera*), taro (*lareñ*), and sweet potato. The good health and fine physique of Enewetak people in the past was partly due to the high nutritional value of their traditional foods. Today, they are not as healthy, because they eat too many western foods.

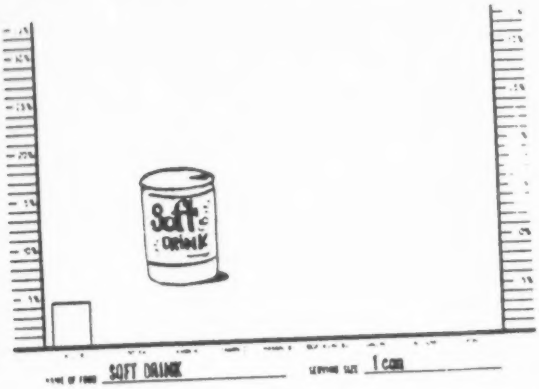
How Much Carbohydrates Should be Eaten?

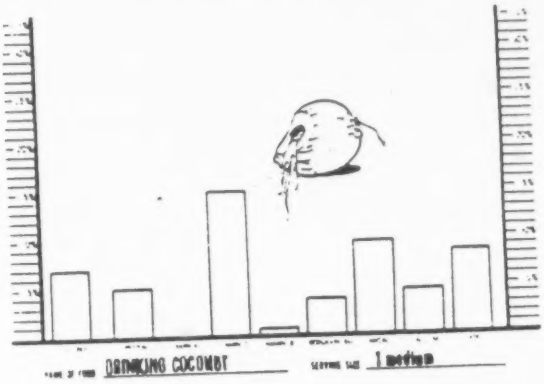
Plants and animals store energy in the form of carbohydrates and fat. These reserves are used in time of need, just as people used to store breadfruit in the ground to use when food was scarce. Animals and human beings use fat stored in the body for energy when food is scarce also. We can see from the charts, that sugar, rice and bread contain many more calories of energy than traditional starch foods, but are poor sources of nutrients.

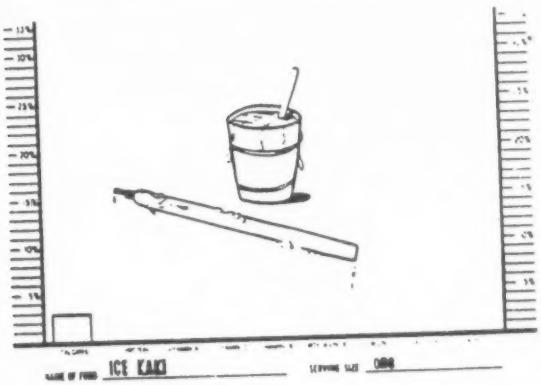
Some people make the mistake of trying to eat as much rice, sugar or bread as they would of breadfruit, pandanaus, taro or yams. They get more energy than their bodies can burn up right away, and thus, the extra food is stored as fat in the body. This is the way they gain weight. A fat person can strain their internal organs by allowing the body to carry too much weight. Fat people are more likely to develop diseases of the heart and eyes, and may get diabetes than thin people

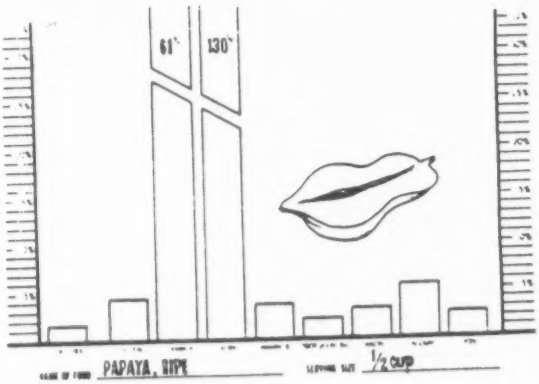


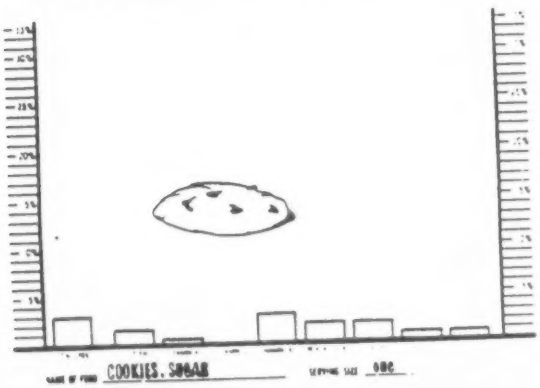


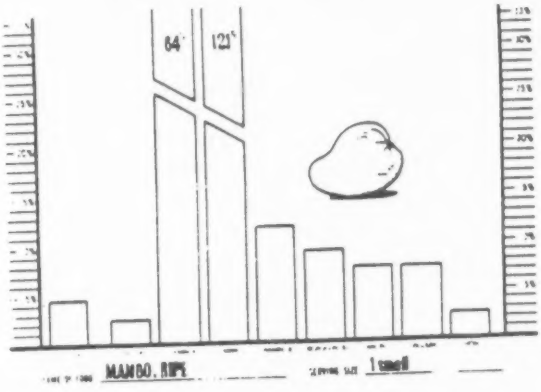




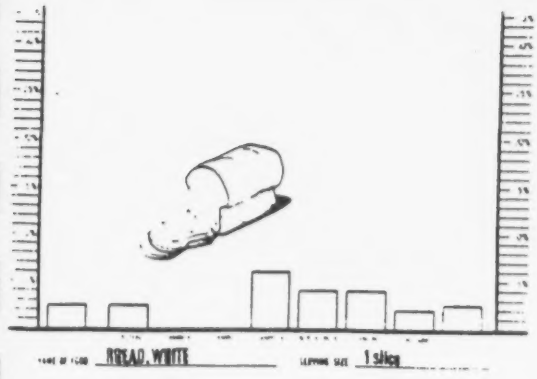


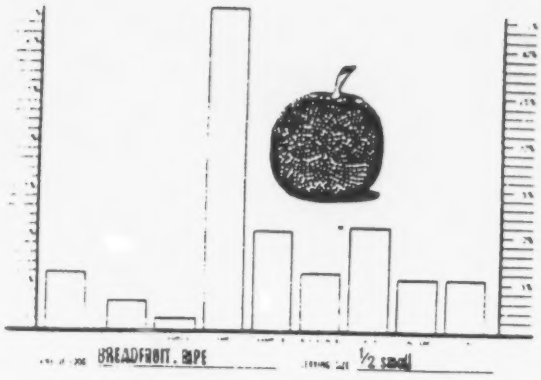


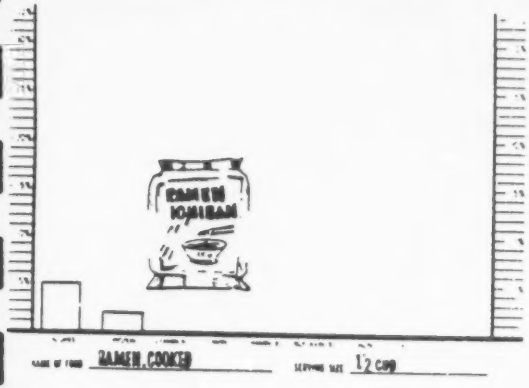


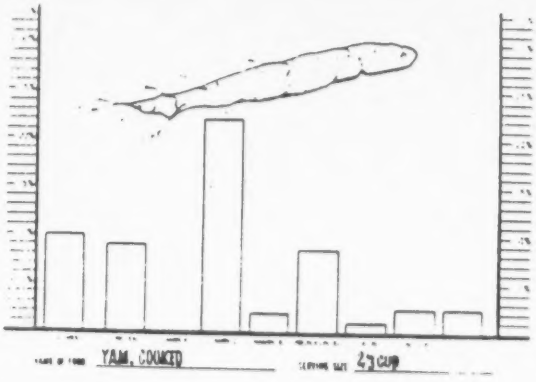


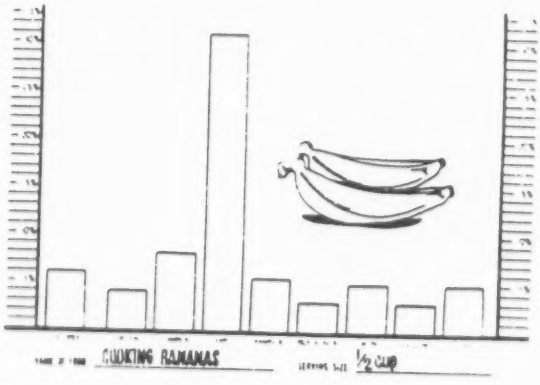
Some snack foods such as candies have very low amounts of nutrients. Local snack foods such as drinking coconut and guava are much better.

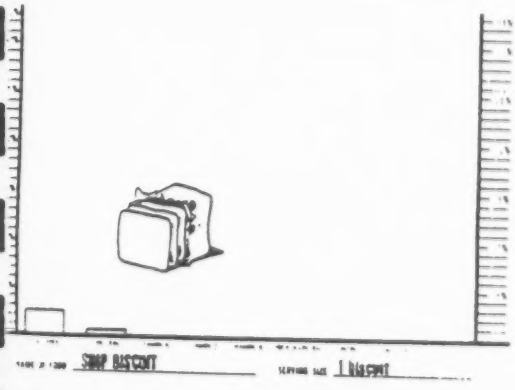


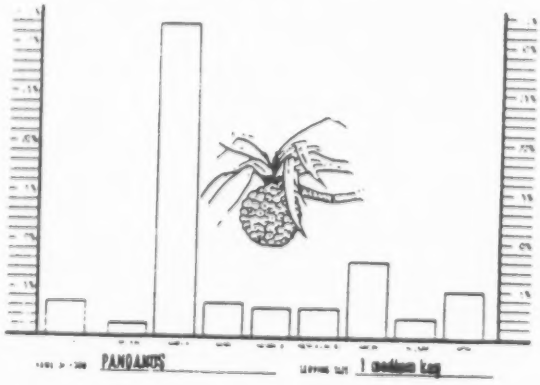












Imported foods such as rice and ramen are not as high in nutrients as many traditional starch foods.

Some carbohydrates foods have a very low amount of nutrients. These are foods such as ramen, ship biscuits, cakes, cookies, candies, cola and sugary cereals. Compare these foods with traditional foods. [Refer to last handout.] Western foods are bad for the teeth because they have a lot of sugar. Dental decay (holes and black spots) has become a serious problem in the Pacific, especially among children. Sugar and starch stick to the teeth and cause damage to the teeth.

How Does the Body Use Carbohyrates?

In the mouth, starchy foods are chewed and mixed with spit. Spit is called **saliva**. Saliva starts the breakdown of starches like rice, breadfruit, bread, donuts, and pancakes (*rej, ma, bilawa, donaj, bankek*) into sugars. The digestive juices in the stomach and the intestines complete the breakdown of starch and sugars into an energy substance called **glucose**. Glucose then is absorbed into the bloodstream from the intestines and carried around the body. Muscles and other tissues in the body take up glucose from the bloodstream and use it to give heat and energy. Some glucose is stored in the liver as carbohydrates for future use. If there is a large amount of extra glucose in the body, it is changed into fat and stored in the body as fatty tissue. Glucose cannot be used to give heat and energy in the body unless there is an important substance present. This substance is called **insulin**. A healthy person produces insulin from a gland in his body called the pancreas. If this gland is diseased and only produces a little bit of insulin, or no insulin at all, the person cannot get very much of the needed heat and energy from glucose. This person is said to have diabetes *(tonal)*. Warning signs of diabetes are frequent thirst, frequent urination, blurred vision, tired and weak, crabiness, headaches, and tingling or loss of feeling in the hands or feet. When diabetes is not controlled, it can lead to blindness, heart disease, kidney failure, or loss of feeling in the feet and toes which might lead to amputation.

People who have diabetes must eat special meals, and be given insulin in a shot or tablet form (pills). There is no cure for **diabetes**, and so **the person who has it must be very careful about the food he eats**. The person with diabetes needs to lose weight if he is fat. That person should eat less starchy food, especially rice, sugar, and bread in their daily meals, and should not eat fats (*kref*) or fried foods. He also needs to exercise fifteen (15) minutes after every meal or a solid thirty (30) minutes one time each day.

The following 11 rules will help a diabetic person control his diabetes.

1) Eat less starchy foods. When you eat a starchy food, eat traditional starchy foods such as pandanus or breadfruit

instead of sugar, rice, or bread, whenever possible. (*Kwon monel kinampu ak ma. Kwojab monel (uka, reij, ak bilawa.)*

2) Always eat meat and vegetables with carbohydrate foods. Do not eat a meal of only starch
3) Eat a protective food every day - either a fruit or vegetable.
4) Do not eat fried or fatty foods such as donuts (*donaj*), pancake, fried donut balls (*oraj*), and fried meats.
5) Do not drink soda pop (*kolas*) or sugared drinks (coffee, tea, milk, etc.) Drink drinking coconut (*oj*), water (*dren*) or milk instead, or non-sugared tea or coffee. If you have to drink sodas (*kola*), only drink diet pop (the kind with no sugar)
6) Do not drink alcoholic beverages (*jeaj, or bottle*). If you have to, only drink it when you eat food.
7) Do not smoke. It makes your blood vessels die in your feet so that you cannot feel them. This may lead to amputation of your toes, feet or leg.
8) Lose weight if you are fat.
9) Exercise fifteen (15) minutes after every meal or a solid thirty (30) minutes one time each day

To prevent diabetes:

10) Encourage children to eat fruits or vegetables in place of candies, cakes, cookies, chips, cola, and ice cream for their snacks.
11) Do not add sugar to milk. People will soon learn to like it without sugar.

Conclusion

Many people think that food is something to fill the stomach. As long as a child has a full stomach, people believe that the child will be healthy. In traditional times this was true. People ate a diet of pandanus, fish, breadfruit, coconut, arrowroot, and marine foods. These foods are full of the vitamins, minerals and proteins needed for children and pregnant women to grow strong, healthy bodies, and for adults to maintain health. A change has come to the Marshall Islands, however, in the way people eat. Much of the food is bought from stores and it is very expensive. Parents often find that they must feed their families a great deal of rice with a bit of canned meat or fish for flavor. For special treats they buy their children sweets--candy, cola, cookies. It costs a lot, but children like the sweet taste so much, who could refuse them? And the children are given plenty to eat. No one goes hungry.

The problem is that rice and flour do not contain very many of the vitamins and minerals needed for the healthy growth of a child's body, and

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candy (*kandi*) and soft drinks (*kola*) contain no nutrients at all. This is why a child who eats a lot of rice or foods made from flour can get malnutrition The child can also easily get other diseases such as runny noses, coughs, flu and stomach problems because his body is weakened.

Sweet foods do not contain many essential proteins, vitamins and minerals either, and worse still, they cause the child's teeth to decay. But many people think that this does not matter, because they are only "baby" teeth. This is not true. Baby teeth are very important because they serve as guides for the permanent adult teeth. If the baby teeth are allowed to decay, the child will have a lifetime of dental problems.

Enewetak people are good parents. Children are their most precious possession. They are given the best care their parents know how to provide Malnutrition has become a problem because parents have not been given the knowledge of how to correctly use the new foods now being eaten in the Marshall Islands. The nutrition lessons that were taught in April 1991 on Enewetak Atoll and this report have changed that by teaching a mother or father to be sure to feed a child a "balanced diet" at every meal, and to be a good role model and eat a "balanced diet" themselves. This means that at each meal a child should eat some meat or fish, some vegetables or fruit, and a starch food, preferably an indigenously-grown starch like taro, sweet potato, or breadfruit. Coconut water, milk or fruit juice should be drunk instead of sugared water or soft drinks. A parent should sit with children at mealtimes, and make sure that they eat the right foods. Children somtimes do not want to eat certain foods, such as vegetables, but the wise parent knows that children need these foods for health and strength, and insists that they be eaten.

For special treats wise parents give their children healthy food such as fresh fruit, or a can of milk or fruit juice. They know that it is a waste of money to buy a lot of candy or soft drinks. Informed parents such as these are the best protection that Enewetak children can have.

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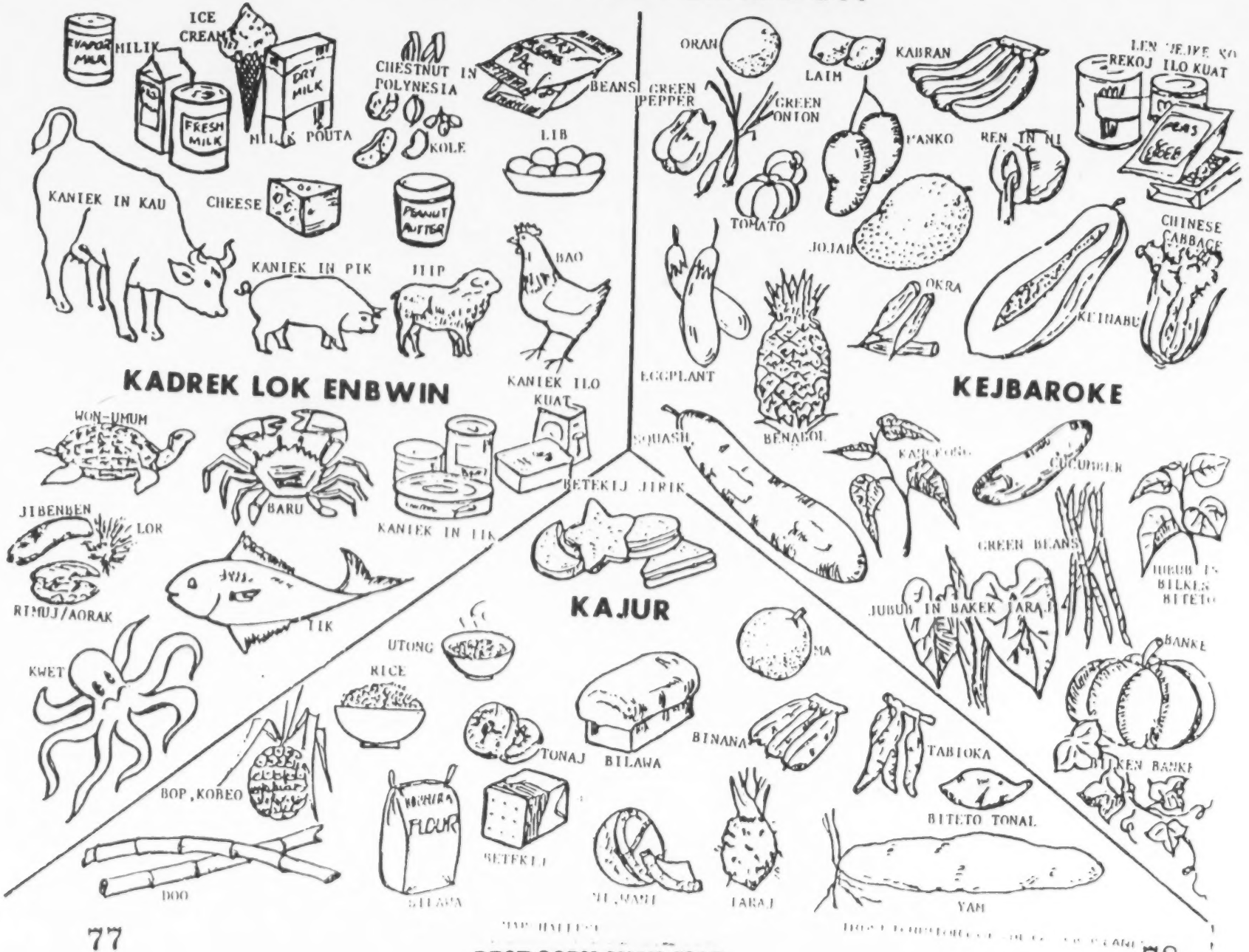

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Changes Implemented by the Council

From the time when the first Europeans and Americans sailed to the Pacific, until less than fifty years ago, Pacific Islanders depended mainly on local food resources. There was so much good food available that the sailors in these ships often traded valuable goods like iron for food. Some islands which did not have certain foods traded with other islands that did. People preserved foods so that they would have enough to eat during storms or when there was little rain. Pacific Islanders became famous for their strong, healthy bodies, and beautiful teeth and skin because they ate such good food.

Unfortunately, food is now becoming a problem in the Pacific Islands. There is enough food to eat, but it is becoming much harder to find nutritious locally grown foods and locally caught fish, especially in the bigger towns and in artificially impoverished environments, like Enewetak. On many islands there are shortages of nutritious foods such as coconut milk (*niñ*), sprouted coconut (*iù*), coconut sap (*jekero*), breadfruit, pandanus, papaya, taro, yams, sweet potatoes, taro tops, pineapples, and mangoes, and other local vegetables and fruits. There is little fresh fish available. When these foods are available, they are very expensive to buy in stores or import, and the people cannot afford to eat them very often. Imported canned foods are even more expensive on Enewetak, because the cost of shipping them there is so high. Instead, people buy rice, flour, sugar, and soft drinks, because they are cheaper and easy to find. Many Enewetak people said they would like to eat fresh fruits, fresh vegetables and fresh fish, but these foods are not available to the Enewetak people.

Some solutions to this problem and the problem of malnutrition that the Enewetak council may want to implement follow:

1) Instead of ordering cans of food that the people do not like to eat such as sardines, dried onions and V-8 juice, spend that money on buying traditional foods. Send the Wetak II boat to neighboring islands to buy fresh foods every two to three weeks.

2) In place of buying extra canned evaporated milk and canned tuna with the supplemental food budget, increase your requested amount of these items from the United States Department of Agriculture (USDA) commodity food program. With the saved money, buy fresh traditional foods from sources used in the above recommendation.

3) Pay local youth to supply drinking coconut (*niñ*), sprouted coconut (*iù*), coconut sap (*jekero*), breadfruit (*maa*), papaya (*kinampu*), fish (*iik*), and other marine foods to the local stores. Sell the local foods for a few cents less than the expensive imported foods such as cola, candy, cookies, and

canned meats. Doing so would save the store owners the money they now pay for expensive shipping costs, would provide better food choices to Enewetak people that are high sources of many nutrients, and would reduce the high incidence of malnutrition and disease

4) In place of buying jars of mixed vegetables for babies, which are not well-liked, buy jars of sweet potato, carrots, peas, green beans and squash. These are all great sources of nutrients for babies and are favorites. For fruits, consider buying jars of peaches, apricots, and pears for the babies instead of bananas. Use fresh bananas and mash them for the babies. Fresh fruits are better and cheaper than the jars of baby fruit.

5) Start your own businesses on Enewetak. Grow chickens for slaughter and for eggs. This would provide fresh, cheaper eggs and chicken than shipping them in by airplane. The fresh products would have higher sources of nutrients than the imported ones. Shipping in grain and chicken feed by boat for the chickens would be much cheaper than shipping in the frozen chickens and eggs by airplane.

6) Do not allow candy, cola, or cookies to be sold to children before four o'clock in the afternoon, and do not sell these items near the school. If the children are going to buy food, encourage them to buy only nutritious items, particularly local foods, by not having the imported foods available for sale before 4:00 p.m.

7) Make sure the mothers of all school-aged children get up and feed the children <u>every day</u> before they leave for school. Children cannot learn if they do not eat good food.

8) Encourage people to <u>eat</u> good food at least three times a day <u>as a family</u>, unless the children are fed balance meals at school. Infants and children up to five years of age, need to eat at least five times a day. <u>Make sure that every meal has a protein food, a protective food and an energy food.</u>

9) Have an adult sit with the children and watch to make sure they eat <u>all three types of food at every meal</u>.

10) Men need to make sure that the family has all three types of food available at every meal. Women need to prepare all three types of food in combination at every meal.

GOOD MEALS CONTAIN FOODS FROM THE THREE FOOD GROUPS

We have seen that it is possible to divide foods into three main groups according to the most important functions of these foods in the body. Good meals should contain at least one food from these three food groups.

THE THREE FOOD GROUPS

Foods for Body-Building and Repair

Iik	Fish
Pik	Pig
Bao	Chicken
Kao	Cow
Milik	Milk
Lib	Eggs
Kwet	Octopus
Won	Turtle
Eman	Crab
	Shellfish
Jiij	Cheese
Kwole	Nuts
Plin	Dry Beans
	Sea Urchin
Pinaj Bota	Peanut Butter

Foods for Energy and Warmth

Bop	Breadfruit
Rilj	Rice
Bilawa	Bread
Makmok	Pandanus
Ma	Coconut
Donaj	Donut
Bitikut	Ship Biscuit
	Tapioca
	Yam
	Sweet Potato
	Ramen
	Sugar Cane
	Cooking Banana
	Cakes
	Cookies

Foods for Protection from Disease

Kinampu	Papaya
Bunkin	Pumpkin
Ni	Drinking Coconut
Binana	Banana
	Pineapple
	Green Bean
	Mango
	Cabbage
	Orange
	Limes
	Eggplant
	Taro Tops
	Guava
Iu	Sprouted Coconut
	Sweet Potato
Mede	Gelatinous Liner of Sprouted Coconut

11) All young and old adults on the island need to increase their exercise to prevent diabetes and obesity. Forms of exercise can be fishing, swimming, climbing trees, husking coconuts, riding bicycles, or simply, walking. The exercise needs to be active enough to make you breathe hard and last 30 minutes without stopping. If you exercise every day, you will live longer, feel better, and lessen your chances of major diseases such as diabetes, heart problems, and obesity.

In summary then, all of the modern day problems with malnutrition, slow growth, short stature (height), frequent infections, scarred skin, being stupid or mentally retarded, having holes and black spots on the teeth or rotting teeth which fall out, and diabetes all have happened since adopting and eating western foods. The western foods such as rice (*reiļ*), flour (*bilawā*), sugar (*jukā*), grease (*kreaļ*), and soda pop (*kolā*) do not contain enough protein, vitamins or minerals. Adopting the above suggestions and implementing them on Enewetak Atoll will help stop the high rates of malnutrition, disease and diabetes.

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